



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
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DALLAS, TX 75202-2733

FEB 25 2000

Mr. J. Dale Givens
Secretary
Louisiana Dept. of Environmental Quality
7290 Bluebonnet Blvd. 6th Floor
Baton Rouge, LA 70810

Dear Mr. Givens:

The Environmental Protection Agency (EPA) is pleased to approve the following TMDLs and updates to the Louisiana Water Quality Management Plan:

- Bayou Plaquemine Brule TMDLs (one report)
- Subsegment 050201 Bayou Plaquemine Brule DO
 - Subsegment 050201 Bayou Plaquemine Brule Nitrogen

EPA received the final TMDLs on January 14, 2000, accompanied by your Agency's letter dated January 6, 2000. We commend your staff for the considerable effort that went into developing and establishing these TMDLs.

Based on our review, detailed in the enclosed document, we conclude that the TMDLs meet the statutory requirements found in Section 303 of the Clean Water Act and the implementing regulations at 40 CFR 130.7. If you would like to discuss this approval, please contact me or Troy Hill of my staff at (214) 665-6647.

Sincerely yours,


for William B. Hathaway
Director
Water Quality Protection Division

Enclosure

TMDL: Bayou Plaquemine Brule TMDLs for Dissolved Oxygen and Nitrogen
 Subsegment 050201

REVIEW ELEMENTS OF TMDLs

Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations at 40 C.F.R. § 130 describe the statutory and regulatory requirements for approvable TMDLs. The following information is generally necessary for EPA to determine if a submitted TMDL fulfills the legal requirements for approval under Section 303(d) and EPA regulations, and should be included in the submittal package. Although EPA has examined each of the elements enumerated below, not all of them are necessary elements to an approvable TMDL.

Comment: **The TMDL document dated March 26, 1999, for Bayou Plaquemine Brule is for oxygen demanding pollutants (CBOD, NBOD, SOD) and Nitrogen.**

1. Description of Waterbody, Pollutant of Concern, Pollutant Sources and Priority Ranking

The TMDL analytical document must identify the waterbody as it appears on the State/Tribe's 303(d) list, the pollutant of concern and the priority ranking of the waterbody. The TMDL submittal must include a description of the point and nonpoint sources of the pollutant of concern, including the magnitude and location of the sources. Where it is possible to separate natural background from nonpoint sources, a description of the natural background must be provided, including the magnitude and location of the source(s). Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation. The TMDL submittal should also contain a description of any important assumptions made in developing the TMDL, such as: (1) the assumed distribution of land use in the watershed; (2) population characteristics, wildlife resources, and other relevant information affecting the characterization of the pollutant of concern and its allocation to sources; (3) present and future growth trends, if taken into consideration in preparing the TMDL; and, (4) explanation and analytical basis for expressing the TMDL through *surrogate measures*, if applicable. *Surrogate measures* are parameters such as percent fines and turbidity for sediment impairments, or chlorophyll *a* and phosphorus loadings for excess algae.

Comment: *Bayou Plaquemine Brule, Subsegment 0502 was listed on 1998 303(d) list and the October 28, 1999, Court Ordered list for dissolved oxygen and nitrogen. The Subsegment was ranked priority one. The suspected causes of impairment were organic enrichment / low dissolved oxygen and nutrients.*

The TMDL report includes a description of the portion of the watershed modeled and documents the technical justifications for model development.

2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target

The TMDL submittal must include a description of the applicable State/Tribe water quality standard. Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation. A numeric water quality target for the TMDL (a quantitative value used to measure whether or not the applicable water quality standard is attained) must be identified. If the TMDL is based on a target other than a numeric water quality criterion, then a numeric expression, usually site specific, must be developed from a narrative criterion and a description of the process used to derive the target must be included in the submittal.

Comment:

A. Dissolved Oxygen (DO) STANDARDS

Subsegment 0502

<i>SEASON</i>	<i>TEMPERATURE (°C)</i>	<i>DO (mg/L)</i>
<i>(March – November)</i>	<i>32</i>	<i>3.0</i>
<i>(December- April)</i>	<i>32</i>	<i>5.0</i>

Nitrogen

LDEQ's water quality standards read "The naturally occurring range of nitrogen-phosphorus ratios shall be maintained. This range shall not apply to designated intermittent streams. To establish the appropriate range of ratios and compensate for natural seasonal fluctuations, the administrative authority will use site-specific studies to establish limits for nutrients. Nutrient concentrations that produce aquatic growth to the extent that it creates a public nuisance or interferes with designated water uses shall not be added to any surface waters."

In addition, LDEQ issued a declaratory ruling on April 29, 1996, concerning this language and stated, "That DO directly correlates with overall nutrient impact is a well-established biological and ecological principle. Thus, when the LDEQ maintains and protects DO, the LDEQ is in effect also limiting and controlling nutrient concentrations and impacts." The nitrogen loading required to maintain the dissolved oxygen standards is the nitrogen TMDL.

3. Loading Capacity - Linking Water Quality and Pollutant Sources

As described in EPA guidance, a TMDL identifies the loading capacity of a waterbody for a particular pollutant. EPA regulations define loading capacity as the greatest amount of loading that a water can receive without violating water quality standards (40 C.F.R. § 130.2(f)). The loadings are required to be expressed as either mass-per-time, toxicity or other appropriate measure (40 C.F.R. § 130.2(i)). The TMDL submittal must identify the waterbody's loading capacity for the applicable pollutant and describe the rationale for the method used to establish the cause-and-effect relationship between the numeric target and the identified pollutant sources. In most instances, this method will be a water quality model. Supporting documentation for the TMDL analysis must also be contained in the submittal, including the basis for assumptions, strengths and weaknesses in the analytical process, results from water quality modeling, etc. Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation.

In many circumstances, a *critical condition* must be described and related to physical conditions in the waterbody as part of the analysis of loading capacity (40 C.F.R. § 130.7(c)(1)). The critical condition can be thought of as the "worst case" scenario of environmental conditions in the waterbody in which the loading expressed in the TMDL for the pollutant of concern will continue to meet water quality standards. *Critical conditions* are the combination of environmental factors (e.g., flow, temperature, etc.) that results in attaining and maintaining the water quality criterion and has an acceptably low frequency of occurrence. *Critical conditions* are important because they describe the factors that combine to cause a violation of water quality standards and will help in identifying the actions that may have to be undertaken to meet water quality standards.

Comment: The loading capacity to meet the dissolved oxygen and nitrogen standards were determined using the QUAL-TX water quality model. The input parameters and assumptions used in the model are an acceptable application of this model for these parameters. See the attached technical review document concerning the water quality model. These are the loading capacities at the 7Q10 flows and critical conditions. Appendices D and E of the TMDL report present the model projection input and output along with DO plots. Appendix F of the TMDL report has a breakdown of the TMDL calculation by pollutants. Table 6 of the TMDL report lists the TMDL as ultimate oxygen demand. The following is from Table 6:

*Total Ultimate Oxygen Demand (Summer) = 21,227 lbs/day
(Total Oxygen Demand = UCBOD + UNBOD + SOD)*

Total Ultimate Oxygen Demand (Winter) = 21,522 lbs/day

*The nitrogen TMDL (NBOD lbs/day) for the summer = 851 lbs/day of NBOD
The nitrogen TMDL for the winter season = 1429 lbs/day of NBOD*

4. Load Allocations (LAs)

EPA regulations require that a TMDL include LAs, which identify the portion of the loading capacity allocated to existing and future nonpoint sources and to natural background (40 C.F.R. § 130.2(g)). Load allocations may range from reasonably accurate estimates to gross allotments (40 C.F.R. § 130.2(g)). Where it is possible to separate natural background from nonpoint sources, load allocations should be described separately for background and for nonpoint sources.

If the TMDL concludes that there are no nonpoint sources and/or natural background, or the TMDL recommends a zero load allocation, the LA must be expressed as zero. If the TMDL recommends a zero LA after considering all pollutant sources, there must be a discussion of the reasoning behind this decision, since a zero LA implies an allocation only to point sources will result in attainment of the applicable water quality standard, and all nonpoint and background sources will be removed.

Comment: Appendix F of the TMDL report has a breakdown of the LA calculation by pollutant. Appendix F of the TMDL report lists the LA (headwater/tributary loads) as ultimate oxygen demand (DO). The following is from Appendix F:

For Summer DO Criteria of 3.0 mg/l

Total LA Summer = 19,302 lbs/day

For Winter DO Criteria of 5.0 mg/l

Total LA Winter = 18,702 lbs/day

LA for Nitrogen (NBOD)

Summer = 34 lbs/day NBOD

Winter = 339 lbs/day NBOD

5. Wasteload Allocations (WLAs)

EPA regulations require that a TMDL include WLAs, which identify the portion of the loading capacity allocated to existing and future point sources (40 C.F.R. § 130.2(h)). If no point sources are present or if the TMDL recommends a zero WLA for point sources, the WLA must be expressed as zero. If the TMDL recommends a zero WLA after considering all pollutant sources, there must be a discussion of the reasoning behind this decision, since a zero WLA implies an allocation only to nonpoint sources and background will result in attainment of the applicable water quality standard, and all point sources will be removed.

In preparing the wasteload allocations, it is not necessary that each individual point source be assigned a portion of the allocation of pollutant loading capacity. When the source is a minor discharger of the pollutant of concern or if the source is contained within an aggregated general permit, an aggregated WLA can be assigned to the group of facilities. But it is necessary to allocate the loading capacity among individual point sources as necessary to meet the water quality standard.

The TMDL submittal should also discuss whether a point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur. In such cases, the State/Tribe will need to demonstrate reasonable assurance that the nonpoint source reductions will occur within a reasonable time.

Comment: The Bayou Plaquemine Brule watershed includes numerous permitted dischargers; however, the model only looked at dischargers impacting Bayou Plaquemine Brule subsegment 0502. Eight dischargers were included in the modeled segment. Appendix F of the TMDL report has a breakdown of the WLA calculation by pollutant. Table 6 of the TMDL report lists the WLA as ultimate oxygen demand. The following is from Table 6:

*DO (ultimate oxygen demand)
WLA (for Summer 3 mg/l DO criteria) = 1,540 lbs/day*

WLA (for Winter 5 mg/l DO criteria) = 2,256 lbs/day

*Nitrogen
WLA (for Summer) = 818 lbs/day*

WLA (for Winter) = 1,090 lbs/day

6. Margin of Safety (MOS)

The statute and regulations require that a TMDL include a margin of safety to account for any lack of knowledge concerning the relationship between load and wasteload allocations and water quality (CWA § 303(d)(1)(C), 40 C.F.R. § 130.7(c)(1)). EPA guidance explains that the MOS may be implicit, i.e., incorporated into the TMDL through conservative assumptions in the analysis, or explicit, i.e., expressed in the TMDL as loadings set aside for the MOS. If the MOS is implicit, the conservative assumptions in the analysis that account for the MOS must be described. If the MOS is explicit, the loading set aside for the MOS must be identified.

Comment: LDEQ applies an explicit MOS of 20% on point source loads (see Appendices D and E). In addition, to the explicit MOS, LDEQ estimates that there is an additional 10% implicit MOS based on conservative assumptions in the model.

Conservative Assumptions Include:

*Assuming 7Q10 and 90% temperature occur at same time.
Assume point sources are discharging at design flow.*

7. Seasonal Variation

The statute and regulations require that a TMDL be established with consideration of seasonal variations. The method chosen for including seasonal variations in the TMDL must be described (CWA § 303(d)(1)(C), 40 C.F.R. § 130.7(c)(1)).

Comment: Critical conditions for dissolved oxygen were determined for the Mermentau Basin using long term water quality data from six stations on the LDEQ Ambient Monitoring Network and the Louisiana Office of State Climatology water budget. Graphical and regression techniques were used to evaluate the temperature and dissolved oxygen data from the Ambient Monitoring Network and the run-off determined from the water budget. Temperature is strongly inversely proportional to dissolved oxygen and moderately inversely proportional to run-off. The analysis concluded that the critical conditons for dissolved oxygen concentrations were those of negligible nonpoint run-off and low stream flow combined with high stream temperature.

The model does however, account for the nonpoint source loading during high flows by including the SOD rate in the model. Loading that occurs during high flows settles to the bottom and during the critical period is accounted for in the SOD rate.

8. Monitoring Plan for TMDLs Developed Under the Phased Approach

EPA's 1991 document, *Guidance for Water Quality-Based Decisions: The TMDL Process* (EPA 440/4-91-001), recommends a monitoring plan when a TMDL is developed under the phased approach. The guidance recommends that a TMDL developed under the phased approach also should provide assurances that nonpoint source controls will achieve expected load reductions. The phased approach is appropriate when a TMDL involves both point and nonpoint sources and the point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur. EPA's guidance provides that a TMDL developed under the phased approach should include a monitoring plan that describes the additional data to be collected to determine if the load reductions required by the TMDL lead to attainment of water quality standards.

Comment: These TMDLs are not phased approach TMDLs; however, LDEQ will continue to monitor this subsegment as part of its rotating basin monitoring plan. This monitoring will be used to determine whether standards are attained.

9. Reasonable Assurances

EPA regulations at 40 CFR 122.44(d)(1)(vii) require that effluent limits in NPDES permits for point sources be consistent with assumptions and requirements of wasteload allocations for the discharge contained in an EPA-approved TMDL. To address that requirement, EPA guidance provides that in watersheds impaired by a blend of point and nonpoint sources, where any wasteload allocation to a point source is increased based on assumption that loads from nonpoint sources will be reduced, the State should provide "reasonable assurances" that the nonpoint source load allocations will in fact be achieved. See, Robert Perciasepe, Assistant Administrator, Office of Water, "New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs)," August 8, 1997 at p.5. EPA's current guidance and policies on establishment of TMDLs does not yet specifically address implementation of TMDLs for waters impaired only by nonpoint sources or by a blend of point and nonpoint sources in which nonpoint sources dominate. However, if a point source receives an allocation in a TMDL for such a waterbody, EPA believes, consistent with established policy, that a State should still provide some assurances that required nonpoint source load reductions will occur in the future. Those assurances will be evaluated by EPA on a TMDL-by TMDL basis. EPA has stated that "[t]he primary implementation mechanism [for waters impaired solely or primarily by nonpoint sources] will generally be the State section 319 nonpoint source management program coupled with State, local and Federal land management programs and authorities." Perciasepe Memo at 5.

Comment:

In this TMDL, the LDEQ has stated that it will work with other agencies such as local Soil Conservation Districts to implement agricultural best management practices in the headwaters watershed through the nonpoint source program, and will also continue to monitor the waters to determine whether standards are being attained. Given that all point sources in this waterbody combined contribute just 7.6% of the load allocated in this TMDL in the summer and just 9.5% in the winter, and that the wasteload allocations for these point sources are remaining the same (not being increased), EPA believes that LDEQ has provided the necessary assurances in this case.

10. Public Participation

EPA policy is that there must be full and meaningful public participation in the TMDL development process. Each State/Tribe must, therefore, provide for public participation consistent with its own continuing planning process and public participation requirements (40 C.F.R. § 130.7(c)(1)(ii)). In guidance, EPA has explained that final TMDLs submitted to EPA for review and approval must describe the State/Tribe's public participation process, including a summary of significant comments and the State/Tribe's responses to those comments. When EPA establishes a TMDL, EPA regulations require EPA to publish a notice seeking public comment (40 C.F.R. § 130.7(d)(2)).

Inadequate public participation could be a basis for disapproving a TMDL; however, where EPA determines that a State/Tribe has not provided adequate public participation, EPA may defer its approval action until adequate public participation has been provided for, either by the State/Tribe or by EPA.

Comment: A notice of public comment period was published in newspapers and the LDEQ public notice document on November 7, 1999 stating that comments would be accepted on this TMDLs through December 6, 1999. One comment was received on this TMDL and LDEQ adequately responded to the comment.

11. Submittal Letter

A submittal letter should be included with the TMDL analytical document, and should specify whether the TMDL is being submitted for a *technical review* or is a *final submittal*. Each final TMDL submitted to EPA must be accompanied by a submittal letter that explicitly states that the submittal is a final TMDL submitted under Section 303(d) of the Clean Water Act for EPA review and approval. This clearly establishes the State/Tribe's intent to submit, and EPA's duty to review, the TMDL under the statute. The submittal letter, whether for technical review or final submittal, should contain such information as the name and location of the waterbody, the pollutant(s) of concern, and the priority ranking of the waterbody.

Comment: The submittal letter is dated 1/6/2000, and was received by EPA Region 6 on 1/14/00. The letter explicitly asks for formal approval of the final TMDL.

12. Other Comments:

The TMDLs meet the requirements found in Section 303(d) of the Clean Water Act and the implementing regulations at 40 CFR 130.7.

Technical Review of Model

DATE: February 18, 2000

SUBJECT: TMDL review for DO and Nitrogen for the Bayou
Plaquemine Brule watershed in Subsegment 0502 of the
Mermentau River Basin (Basin 5).

- I. BACKGROUND
- II. STANDARDS / TREATMENT
- III. MODEL ANALYSIS
- IV. COMMENTS

I. BACKGROUND

The 1998 303(d) list and the October 28, 1999 Court Ordered list cited Bayou Plaquemine Brule, subsegment 0502, as being impaired due to organic enrichment/low DO and nitrogen and required the development of TMDLs. This subsegment was listed as a priority 1 on both lists.

II. STANDARDS / TREATMENT

A. STANDARDS

Dissolved Oxygen

Subsegment 0502

SEASON	TEMPERATURE (deg C)	DO (mg/l)
March - November	32	3
December - February	32	5

Nitrogen

LDEQ's water quality standards read "The naturally occurring range of nitrogen-phosphorus ratios shall be maintained. This range shall not apply to designated intermittent streams. To

establish the appropriate range of ratios and compensate for natural seasonal fluctuations, the administrative authority will use site-specific studies to establish limits for nutrients. Nutrient concentrations that produce aquatic growth to the extent that it creates a public nuisance or interferes with designated water uses shall not be added to any surface waters."

In addition, LDEQ issued a declaratory ruling on April 29, 1996, concerning this language and stated, "That DO directly correlates with overall nutrient impact is a well-established biological and ecological principle. Thus, when the LDEQ maintains and protects DO, the LDEQ is in effect also limiting and controlling nutrient concentrations and impacts." The nitrogen loading required to maintain the dissolved oxygen standards is the nitrogen TMDL.

B. TREATMENT

The discharger inventory for Bayou Plaquemine Brule and its tributaries was reviewed. A search on the LDEQ Permit Tracking System yielded 66 facilities discharging to Bayou Plaquemine Brule and its tributaries. Of these 66, only eight major dischargers were included in the modeled subsegment. The list of facilities and the modeling decision for each is presented in Section 2.4 of the TMDL report.

III. MODEL ANALYSIS

The model was recalibrated using the 1978 survey data. A schematic or vector diagram of the model is presented in Figure 1 of the TMDL report. The calibration model input and output along with plots are presented in Appendices A through F of the TMDL report.

A. Calibration of Hydraulics and Upstream Conditions

Hydraulics

The widths and depths were taken directly from the available field measurements and the plots of width and drainage versus drainage area for some reaches for which no field data were available. The flow calibration was based on measurements taken during the Church Point, Rayne, and Crowley surveys, and on a correlation of those measured flows with drainage area. Water quality calibration was also based on measurements taken during these surveys plus water quality data from the Estherwood ambient

monitoring station and a 1998 assessment site near Egan.

The 90th percentile of the observed stream water temperatures were used in the model. A tidal dispersion rate calculated for Bayou Queue de Tortue based on a 1992 survey data. The calculated tidal dispersion was calculated for RM 22.5 to 30.7 of Bayou Queue de Tortue. The midpoint of this calibrated reach is 31 miles from the top of Lake Arthur and tidal dispersion in Bayou Plaquemine Brule was calibrated to the same value at the same distance from Lake Arthur. Values for the other reaches were obtained by interpolation with respect to stream distance from the top of the tidal portion of the bayou where dispersion is zero.

B. Kinetic Rates at 20 degree C

Appendices B and C for a justification for each kinetic rates

SYMBOL	RATE	JUSTIFICATION
K1 (CBOD Decay)	0.19 - .21 per day	Calibrated
K2 (Reaeration)	4.45 - 4.56 per day	Louisiana Equation
Kn (NBOD Decay)**	0.03 - 0.15 per day	calibrated
Dispersion	0.7827 - 0.7923 sq m/s	Calibrated values
SOD	4.14 - 4.51 gm/sqm/day	calibrated
Ks (CBOD settling)	0.25 per day	calibrated

** Note that the NBOD decay rates were input as NCM (non conservative material) in the model.

C. Model Results

The projection model input and output along with DO plots are presented in Appendices D and E.

Margin of Safety (MOS)

LDEQ uses a 20% MOS for all point source discharges. This is accomplished by assuming that they discharge 20% more flow. In addition, LDEQ estimates that there is an additional 10% MOS included in the conservative assumptions in the model. These assumptions include assuming that low flow and high temperatures occur at the same time in a waterbody. The headwater flows were input at 0.1 cfs for summer low flow conditions to keep the model from crashing.

TMDL

See Tables 6 of the TMDL report for the TMDL pounds per day of total oxygen demand (summer = 21,227 lbs/day; winter = 21,522 lbs/day). The total oxygen demand consists of UCBOD, UNBOD, and SOD components. For summer: WLA = 1,540 lbs/day (UCBOD and UNBOD combined); LA = 86 lbs/day (UCBOD and UNBOD combined); MOS = 385 lbs/day (UCBOD and UNBOD combined); and SOD = 19,216 lbs/day; For winter: WLA = 2,256 lbs/day (UCBOD and UNBOD combined); LA = 868 lbs/day (UCBOD and UNBOD combined); MOS = 564 lbs/day (UCBOD and UNBOD combined); and SOD = 17,834 lbs/day. Table 7 lists the specific point source allocations in mg/l.

Appendix F of the TMDL report includes a breakdown of NBOD loads for the facilities and the headwater loading. The nitrogen TMDL is obtained from this appendix. The nitrogen TMDL (NBOD lbs/day) for the summer is 851 lbs/day of NBOD (WLA = 818 lbs/day NBOD, LA = 34 lbs/day NBOD). The nitrogen TMDL for the winter season is 1429 lbs/day of NBOD (WLA = 1090 lbs/day NBOD, LA = 339 lbs/day NBOD).

Sensitivity Analysis

A sensitivity analysis was performed on all pertinent parameters. Inputs were varied by 30% and the results are recorded in Table 5 of the TMDL report. As shown in Table 5, the model is most sensitive to reaeration rate and SOD. Since reaeration and SOD both are sensitive to depth, therefore, the third sensitive parameter is depth.

IV. COMMENTS

1. The model is adequately calibrated to the survey data. The model results predicted that the proposed TMDLs and load allocations will continue to maintain the DO criteria for the Bayou Plaquemine Brule watershed in Subsegment 0502.
2. The model is technically adequate.



FINAL

BAYOU PLAQUEMINE BRULE WATERSHED TMDL
TO ADDRESS DISSOLVED OXYGEN AND NUTRIENTS
INCLUDING EIGHT POINT SOURCE WASTELOAD ALLOCATIONS
AND A WATERSHED NONPOINT SOURCE LOAD ALLOCATION

SUBSEGMENT 0502

VOLUME I

TMDL Report
Appendix A-D

William C. Berger, Jr.
Jay Carney
Richard K. Duerr

Water Quality Modeling Section
Watershed Support Division
Office of Water Resources
Louisiana Department of Environmental Quality

March 26, 1999

Revised May 8, 2000

EXECUTIVE SUMMARY

A TMDL for dissolved oxygen has been developed for the Bayou Plaquemine Brule Watershed based on hydrologic and water quality data available as of March, 1999. Bayou Plaquemine Brule was listed on both the 1996 and 1998 Section 303(d) Lists as not meeting the water quality standard for dissolved oxygen. Bayou Plaquemine Brule was ranked as a high priority (priority 1) on both lists for development of a TMDL. This waterbody was also listed as impaired due to nutrients. This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources.

The Bayou Plaquemine Brule watershed is segment 0502 of the Mermentau River Basin (Basin 5). Segment 0502 is comprised of Bayou Plaquemine Brule and all tributaries, including Hazelwood Gully, Coles Gully, Long Point Gully, Bayou Wikoff, Bayou Blanc and North Coulee Trief. It is projected that compliance with dissolved oxygen criteria will require a 50 percent reduction of man-made nonpoint loading in the watershed and more stringent limitations for three point source dischargers as follows:

Facility	Flow (mgd)	Permit limitations (BOD ₅ /NH ₃ -N/DO)		Projected limits (BOD ₅ /NH ₃ -N/DO)	
		Summer	Winter	Summer	Winter
Church Point POTW	0.80	10/2/6	10/10/6	10/2/5	20/10/6
Atwood Acres STP	.046	20/-/-	---	10/5/5	30/15/6
Acadian Fine Foods STP	.025	20/-/-	---	20/10/2	30/15/2
North Rayne POTW	.020	20/-/-	---	20/10/2	30/15/2
Crowley High School POTW	.034	30/-/-	---	10/5/5	30/15/6
Crowley POTW	2.47	5/2/5	10/2/5	5/5/5	10/5/6
Rayne POTW	1.50	10/-/-	---	10/5/5	10/5/6
Estherwood POTW	.080	10/-/-	---	10/10/2	30/15/2

There are 66 known dischargers in subsegment 0502, the majority of which are too small to have a significant impact on the watershed model. Limits for these small facilities are generally set by state policy. Current permit information and discharge monitoring reports were reviewed for all of these facilities, and only 8 were considered to have the potential to impact Bayou Plaquemine Brule. The eight facilities above were included in the model based upon their expected or design discharge.

Bayou Plaquemine Brule was modeled from its headwaters (River Kilometer 70.20) to its confluence with Bayou des Cannes (River Kilometer 0.0). Tributaries that received one of the named facilities were modeled from the facility to their confluence with Bayou Plaquemine Brule. Other tributaries were modeled as point sources. Both point and nonpoint source loads were represented in the model; those nonpoint source loads including headwater loading, nonpoint loading associated with flow, benthic sediment oxygen demand and resuspension, and other nonpoint loading not associated with flow.

The various spreadsheets that were used in conjunction with the modeling program may be found in the appendices in the order in which they were used. The flow calibration was based on measurements taken during the Church Point, Rayne, and Crowley surveys, and on a correlation of those measured flows with drainage area. Water quality calibration was also based on measurements taken during these surveys plus water quality data from the Estherwood ambient monitoring station and a 1998 assessment site near Egan. Projections were adjusted to meet the dissolved oxygen criteria by reducing both point source and nonpoint source loading to obtain wasteload and load allocations. Additional projections were run with point source concentrations backed off by one level of treatment. Except where the point source concentrations were already at secondary, the additional runs violate criteria in both summer and winter, indicating that the WLA levels of treatment are the least stringent levels projected to meet criteria.

Land use in the Bayou Plaquemine Brule watershed is fairly homogeneous, comprising principally rice farming, row crops, and pasture. TMDLs have therefore been calculated for the entire watershed and are as follows:

Summer Season (Mar – Nov) TMDLs

	<u>UCBOD (lbs/day)</u>	<u>UNBOD (lbs/day)</u>	<u>MOS (lbs/day)</u>	<u>Total (lbs/day)</u>	<u>% of Total</u>
Church Point POTW	153	57.4	52.7	263	
Atwood Acres STP	8.8	8.3	4.3	21.4	
Acadian Fine Foods STP	9.6	9.0	4.7	23.3	
North Rayne POTW	13.2	12.4	6.4	32.0	
Crowley High School POTW	4.6	4.3	2.2	11.1	
Crowley POTW	237	443	170	850	
Rayne POTW	288	269	139	696	
Estherwood POTW	7.7	14.4	5.5	27.6	
Total point source allocations (WLA)	722	818	385	1,924	9.1
	<u>UCBOD (lbs/day)</u>	<u>UNBOD (lbs/day)</u>	<u>SOD (lbs/day)</u>	<u>Total (lbs/day)</u>	
Nonpoint Load	9,949	6,167	3,099	19,216	
Headwater Load	53	34		87	
Load Allocation (LA)	10,002	6,201	3,099	19,303	90.9
Percent Reduction of man-made nonpoint				50	
Nonpoint source margin of safety (MOS)				0	
Total maximum daily load (TMDL)				21,227	100

Winter Season (Dec – Feb) TMDLs

	<u>UCBOD (lbs/day)</u>	<u>UNBOD (lbs/day)</u>	<u>MOS (lbs/day)</u>	<u>Total (lbs/day)</u>	<u>% of Total</u>
Church Point POTW	307	287	148	742	
Atwood Acres STP	26.5	24.8	12.8	64.2	
Acadian Fine Foods STP	14.5	13.5	7.0	34.9	
North Rayne POTW	19.8	18.5	9.6	48.0	
Crowley High School POTW	13.8	12.9	6.7	33.4	
Crowley POTW	474	443	229	1,146	
Rayne POTW	288	269	139	696	
Estherwood POTW	23.1	21.6	11.2	55.9	
Total point source allocations (WLA)	1,166	1,090	564	2,820	13.1
	<u>UCBOD (lbs/day)</u>	<u>UNBOD (lbs/day)</u>	<u>SOD (lb/day)</u>	<u>Total (lbs/day)</u>	
Nonpoint Load	9,978	6,194	1,661	17,832	
Headwater Load	530	339		869	
Load Allocation (LA)	10,508	6,533	1,661	18,701	86.9
Percent Reduction of man-made nonpoint				50	
Nonpoint source margin of safety (MOS)				0	
Total maximum daily load (TMDL)				21,521	100

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1. Introduction

Bayou Plaquemine Brule, Segment 0502 of the Mermentau Basin, was listed on both the 1996 and 1998 303(d) Lists as being impaired due to organic enrichment/low DO and requiring the development of a total maximum daily load (TMDL) for dissolved oxygen. It was ranked as a high priority (priority 1) for development of a TMDL on both lists. This waterbody was also listed as impaired due to nutrients. This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998)), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources. A calibrated water quality model for the Bayou Plaquemine Brule watershed was developed and projections run to quantify the point source wasteload allocations and nonpoint source load allocations required to meet established dissolved oxygen criteria. This report presents the model development and results.

1.1 Seasonality and Margin of Safety

The Clean Water Act requires the consideration of seasonal variation of conditions affecting the constituent of concern, and the inclusion of a margin of safety (MOS) in the development of a TMDL. For the Bayou Plaquemine Brule TMDL, LDEQ has employed an analysis of long-term ambient data to determine critical seasonal conditions and used a combination of implied and explicit margins of safety.

Critical conditions for dissolved oxygen were determined for the Mermentau Basin using long-term water quality data from six stations on the LDEQ Ambient Monitoring Network and the Louisiana Office of State Climatology water budget. Graphical and regression techniques were used to evaluate the temperature and dissolved oxygen data from the Ambient Network and the run-off determined from the water budget. Since nonpoint loading is conveyed by run-off, this seemed a reasonable correlation to use. Temperature is strongly inversely proportional to dissolved oxygen and moderately inversely proportional to run-off. Dissolved oxygen and run-off are also moderately directly proportional. The analysis concluded that the critical conditions for stream dissolved oxygen concentrations were those of negligible nonpoint run-off and low stream flow combined with high stream temperature.

When the rainfall run-off (and nonpoint loading) and stream flow are high, turbulence is higher due to the higher flow and the temperature is lowered by the run-off. In addition, run-off coefficients are higher in cooler weather due to reduced evaporation and evapotranspiration, so that the high flow periods of the year tend to be the cooler periods. Reaeration rates are, of course, much higher when water temperatures are cooler, and BOD decay rates are much lower. For these reasons, periods of high loading are periods of higher reaeration and dissolved oxygen but not necessarily periods of high BOD decay.

LDEQ interprets this phenomenon in its TMDL modeling by assuming that the annual nonpoint loading, rather than loading for any particular day, is responsible for the accumulated benthic blanket of the stream, which is, in turn, expressed as SOD and/or resuspended BOD in the model. This accumulated loading has its greatest impact on the stream during periods of higher temperature and lower flow.

LDEQ simulated critical summer conditions in the Bayou Plaquemine Brule dissolved oxygen TMDL projection modeling by using the annual 7Q10 flow or 0.1 cfs, whichever is higher, for all headwaters, and 90th percentile temperature for the summer season. Incremental flow was assumed to be zero; model loading was from point sources, perennial tributaries, sediment oxygen demand, and resuspension of sediments. LDEQ simulated critical winter conditions by using the lowest of the monthly 7Q10 flow published for the winter months or 1 cfs, whichever was higher, for all headwaters, and 90th percentile temperature for the season. Again, incremental flow was assumed to be zero; model loading was from point sources, perennial tributaries, sediment oxygen demand, and resuspension of sediments. In addition, LDEQ assumes that all point sources are discharging at maximum capacity.

In reality, the highest temperatures occur in July-August, the lowest stream flows occur in October-November, and the maximum point source discharge occurs following a significant rainfall, i.e., high-flow conditions. The combination of these conditions plus the impact of other conservative assumptions regarding rates and loadings yields an implied margin of safety which is estimated to be in excess of 10%. Over and above this implied margin of safety, LDEQ used an explicit MOS of 20% for both point and nonpoint loads. The total MOS is estimated to exceed 30% for the Bayou Plaquemine Brule TMDL.

2. Study Area Description

2.1 Mermentau River Basin

The Mermentau River Basin is located in southwestern Louisiana, and it encompasses the prairie region of the state and a section of the coastal zone. The Mermentau River Basin is bounded on the north and east by the Vermilion-Teche River Basin, on the west by the Calcasieu River Basin, and on the south by the Gulf of Mexico. The Mermentau River Basin is approximately 3,710 square miles in area, excluding the gulf waters segment (Volume 4, Basin/Segment Boundaries and Inventories, State of Louisiana Water Quality Management Plan, 1987).

The slope of the land toward the Gulf is very gradual, and as a result, the streams in the Mermentau Basin are characteristically sluggish. Fish kills have been commonly reported throughout the basin. Because waterbodies in the basin have little gradient and sluggish flows, their reaeration potential is low (Volume 5, Water Quality Inventory, State of Louisiana Water Quality Management Plan, 1990).

It has been suggested that the water quality problems in the basin may be largely due to agricultural runoff and hydrologic modification. During April and May, large volumes of very turbid water have been observed flowing downstream in these waterbodies, and this has been associated with planting activities in adjacent rice fields (Volume 5, Water Quality Inventory, State of Louisiana Water Quality Management Plan, 1990).

2.2 Bayou Plaquemine Brule Watershed, Segment 0502

This area is typical of the basin with its low relief which is an ideal condition for agricultural use as documented in Table 1. Segment 0502 is comprised of Bayou Plaquemine Brule as the main stem with several tributaries. These tributaries include Hazelwood Gully, Coles Gully, Long Point Gully, Bayou Wikoff, Bayou Blanc and North Coulee Trief.

Average annual precipitation in the segment, based on the nearest Louisiana Climatic Station in Crowley is 56.91 inches based on a 30 year record (LSU State Office of Climatology). Land use in the Mermentau River Basin is largely agricultural, the primary crops being rice and soybeans. Originally, this area was covered by tall prairie grasses, among which there were scattered clumps of trees. (Soil Survey Acadia Parish Louisiana, USDA, SCS, Series 1959, No.15. Issued September 1962). In the segment under study, agricultural uses account for 89% of the total segment area. Land uses in Segment 0502 are shown in Table 1 below (Volume 6, Nonpoint Source Pollution, State of Louisiana Water Quality Management Plan, 1990).

Table 1. Land uses in Segment 0502 of the Mermentau River Basin

<u>Land use</u>	<u>Acres</u>	<u>%</u>
Urban	12,259	3.5
Extractive	1,838	0.5
Agricultural	316,160	89.0
Forest Land	13,475	3.8
Water	536	0.2
Wetland	10,450	2.9
Barren Land	484	0.1

2.3 Water Quality Standards

Water quality standards for the State of Louisiana have been defined (Louisiana Department of Environmental Quality, Environmental Regulatory Code, Part IX, Water Quality Regulations, Chapter 11, 1998). These include both general narrative standards and numerical criteria. General standards include prevention of objectionable color, taste and odor, solids, toxics, oil and grease, foam, and nutrient conditions as well as aesthetic degradation.

Designated uses for Bayou Plaquemine Brule from its headwaters to Bayou Des Cannes (waterbody subsegment 050201) include primary contact recreation, secondary contact recreation, propagation of fish and wildlife, and agriculture.

Bayou Plaquemine Brule is listed on both the 1996 and 1998 303(d) Lists as a waterbody requiring a dissolved oxygen TMDL. Section 303(d) of the Clean Water Act requires the identification, listing, ranking and development of TMDLs for waters that do not meet applicable water quality standards after implementation of technology-based controls. In accordance with the UAA conducted for the Mermentau River Basin, current dissolved oxygen criteria are shown in Table 2. The results of the

UAA were sent to EPA (LDEQ, Mermentau River Basin UAA, 1998. Adopted October 20, 1998. Approved by EPA January 7, 1999).

Table 2. Current Dissolved Oxygen Criteria

March-November	3.0 mg/L
December-February	5.0 mg/L

2.4 Discharger Inventory

The Bayou Plaquemine watershed includes 66 known dischargers, according to LADEQ's permit tracking system. Current permit information and discharge monitoring reports were reviewed for all of these facilities, and only 8 were considered to have the potential to impact Bayou Plaquemine Brule. The balance of the dischargers are located on tributaries and are too small to have an impact on the targeted waterbody due to the small load and the distance upstream. These dischargers are accounted for as nonpoint loading through the process of calibration. They fall within one of several state or regional policies that govern permit limitations. The eight larger facilities that were specifically included in this watershed model are listed below.

Table 3. List of Facilities

<u>Facility Name</u>	<u>Permit Number</u>
Town of Church Point STP	LA0038598
Atwood Acres Subdivision	LAG560020
Crowley High School	LAG540077
Acadian Fine Foods	LA0085723
N. Rayne WWTP – Sills Subdivision	LAG560010
City of Crowley STP	LA0041254
City of Rayne – Main STP	LA0039055
Village of Estherwood	LA0064530

Town of Church Point POTW

This facility treats municipal wastewater with an activated sludge system, sand filtration, post aeration, and ultraviolet disinfection. It has a design flow of 0.8 MGD (1.24 cfs, 0.035 cms). The average monthly permit limits for the summer and winter months are as follows:

<u>Parameter</u>	<u>Summer Limit</u>	<u>Winter Limit</u>
CBOD ₅	10.0 mg/L	10.0 mg/L
TSS	15.0 mg/L	15.0 mg/L
NH ₃ -N	2.0 mg/L	10.0 mg/L
DO	6.0 mg/L	6.0 mg/L

Atwood Acres Subdivision STP

According to the application dated October 1, 1997, this subdivision includes 66 homes and has a maximum capacity of 115 homes. The wastewater treatment facility was designed for the maximum capacity of the subdivision. This resulted in a 46,000 gpd oxidation pond with disinfection by chlorination. Monthly permit limits for both BOD₅ and TSS are 20.0 mg/L.

Acadian Fine Foods STP

This discharger produces wastewater from its crawfish cooking and packaging processes. The peak crawfish-processing season is February through June. Other seafood products are processed during the remainder of the year. The average effluent discharge for the crawfish season is 25,000 gpd. The average effluent discharge for the remainder of the year is 3,000 gpd. The wastewater pretreatment process consists of a package, four station, settling and aeration system. An anaerobic treatment pond, aerobic aeration pond, aerobic filter/settlement pond, and a chlorinator follow this process. Permit limitations of 20 mg/L for both CBOD₅ and TSS are based upon statewide policy for dischargers with an effluent flow between 25,000 gpd and 50,000 gpd.

Crowley High School POTW

This discharger produces sanitary wastewater. Wastewater treatment utilizes an oxidation pond. The design flow was not listed in the State of Louisiana General Permit application dated June 22, 1993. The number of students and school personnel are stated in the application as 1,010 people. The resulting design flow is 20,200 gpd based upon the Sanitary Code for the State of Louisiana, Chapter XIII, Sewerage and Refuse Disposal. The permit limits are 30.0 mg/L for CBOD₅ and 30.0 mg/L for TSS.

N. Rayne POTW – Sills Subdivision

This discharger processes municipal wastewater received from the subdivision. The treatment process consists of an extended aeration package plant. The design flow is 34,400 gpd (0.053 cfs, 0.002 cms). The monthly average permit limit for both CBOD₅ and TSS is 20 mg/L.

City of Crowley POTW

This sewage treatment plant processes municipal wastewater. It incorporates artificial wetlands with a rock/reed filter system and oxidation pond. The design flow is 2.47 MGD (3.82 cfs, 0.11 cms). An expected flow of 1.08 MGD (1.67 cfs, 0.047 cms) was stated in the 1995 NPDES permit application. The design flow was used in the model projections. The summer and winter limits for the facility are provided in the following list. These limits were obtained from the Municipal water Pollution Prevention Plan dated May 29, 1998.

<u>Parameter</u>	<u>Summer Limit</u>	<u>Winter Limit</u>
CBOD ₅	5.0 mg/L	10.0 mg/L
TSS	15.0 mg/L	15.0 mg/L
NH ₃ -N	2.0 mg/L	2.0 mg/L
DO	5.0 mg/L	5.0 mg/L

City of Rayne POTW

This discharger processes municipal wastewater. At the time of the survey of Bayou Blanc at Rayne, treatment was a mechanical activated sludge plant. The treatment process now consists of an aerated lagoon system. The design flow is 1.5 MGD (2.32 cfs, 0.066cms). The average monthly permit limit for CBOD₅ is 10.0 mg/L.

Village of Estherwood POTW

This facility treats municipal wastewater through the use of an overland flow system. The system consists of screens, a communitor, an aeration pond, a holding pond, a distribution system, sloped and vegetated terraces, a collection system and a chlorination system. The design flow is 0.08 MGD (0.12 cfs, 0.0035 cms). The permit limits are 10 mg/L for CBOD₅ and 15 mg/L for TSS.

2.5 Previous Studies and Other Data

Water quality data for this TMDL was obtained from an intensive Survey of Bayou Plaquemine Brule at Church Point conducted October 2-5, 1989, an intensive Survey of Bayou Plaquemine Brule at Crowley conducted August 29, 1993-September 2, 1993, an intensive Survey of Bayou Blanc at Rayne conducted July 18-23, 1993, the DEQ ambient monitoring station on Bayou Plaquemine Brule at Estherwood, Number 58010004, and measurements of Bayou Plaquemine Brule taken at assessment site number 0650 near Egan in 1998. Data from an intensive Survey of Bayou Plaquemine Brule at Crowley conducted September 18-21, 1989 was not used.

3. Model Documentation

3.1 Program Description

The modeling system used to simulate the Bayou Plaquemine Brule stream network was QUAL-TX, a steady-state one-dimensional water quality model developed by the Water Quality Standards and Evaluation Section of the Texas Water Commission. It is a modified version of QUAL-II. It incorporates modifications that Texas felt necessary for modeling Texas streams, including the Texas reaeration equation, a variable element size, and coding that allows multiple models to be linked so that they can be executed in a single run.

3.2 Model Schematic and Description

The Bayou Plaquemine Brule system was modeled according to the vector diagram on the following page. The modeled portion of Bayou Plaquemine Brule extended from river kilometer (RKM) 70.20 to

RKM 0.0. Everything above RKM 70.20 was input as headwaters. River kilometer 0.0 is located at the confluence of Bayou Plaquemine Brule and Bayou des Cannes. Eight permitted dischargers were specifically included in the system, and the five tributaries receiving those discharges were simulated by the model. Seven additional tributaries to Bayou Plaquemine Brule, which were believed to be perennial, were simulated as point source inputs.

For convenience, five unnamed tributaries were given names for the purpose of identification and documentation. The stream receiving the discharge from the Atwood Acres Subdivision treatment plant was named Atwood Gully and a second unnamed stream into which it flows was named Atwood Bayou. These two streams were simulated as a single stream with Atwood Bayou upstream of Atwood Gully simulated as a point source. The stream receiving the discharge from Acadian Fine Foods was named Sills Gully and a second unnamed stream into which it flows was named Sills Bayou. These two streams plus Bayou Wikoff were also simulated as a single stream with Sills Bayou upstream of Sills Gully and Bayou Wikoff upstream of Sills Bayou simulated as a point sources. The stream receiving the discharge from Crowley High Gully was named Crowley High Gully. The Bayou Blanc model included the simulation of a small lake. Roller Canal is a pumped withdrawal used to irrigate ricefields, and the pumps were not running at the time of the 1993 Bayou Plaquemine Survey. This withdrawal was not simulated by the watershed model.

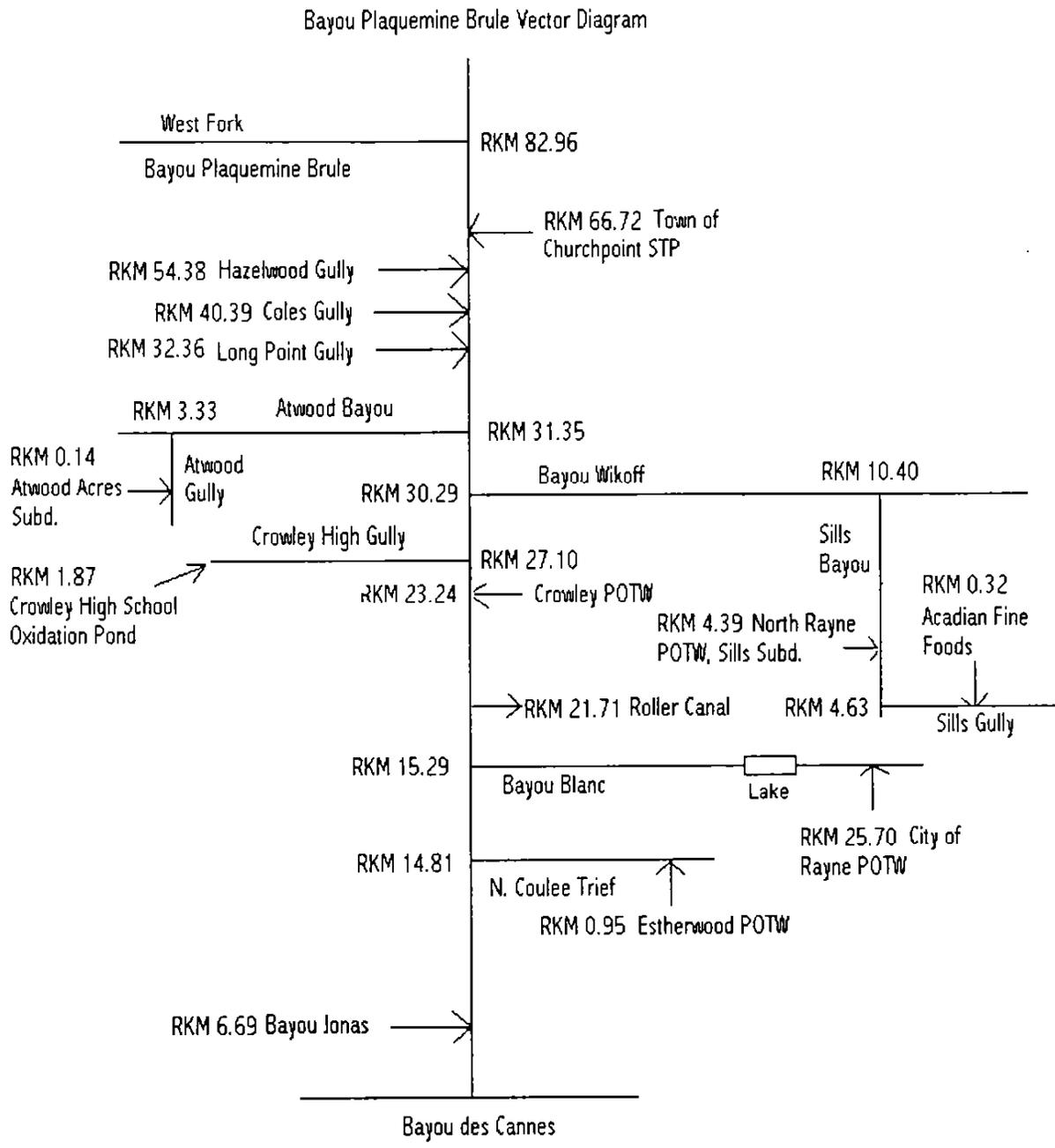


Figure 1. Vector Diagram of the Bayou Plaquemine Brule Watershed

3.3 Calibration and Projection

The various spreadsheets that were used in conjunction with the modeling program may be found in the appendices in the order in which they were used and are described below. The flow calibration was based on measurements taken during the Church Point, Rayne, and Crowley surveys, and on a correlation of those measured flows with drainage area. Water quality calibration was also based on measurements taken during these surveys plus water quality data from the Estherwood ambient monitoring station and a 1998 assessment site near Egan. Projections were adjusted to meet the dissolved oxygen criteria by reducing both point source and nonpoint source loading to obtain wasteload and load allocations. Additional projections were run with point source concentrations backed off by one level of treatment. Except where the point source concentrations were already at secondary, the additional runs violate criteria in both summer and winter, indicating that the WLA levels of treatment are the least stringent levels projected to meet criteria.

3.3.1 Flow Calibration

1. Vector Diagram

The vector diagram shows the main stem of Bayou Plaquemine Brule, the major tributaries, and significant dischargers.

2. Drainage Areas for the Bayou Plaquemine Brule Project

The table lists drainage areas that were obtained from USGS or measured from 1:24,000 topographic maps. Included are areas of tributary headwaters, drainage areas at tributary mouths, and drainage areas at various points along Bayou Plaquemine Brule and major tributaries.

3. Drainage Area Versus Flow

The spreadsheet lists the available flow data and corresponding drainage areas. The flows are taken from low flow surveys of Bayou Plaquemine Brule near Crowley, Bayou Blanc near Rayne, and Bayou Plaquemine Brule near Church Point. A plot of net flow (without POTW discharges) versus drainage area was used to provide estimated flow data where measured data were not available.

4. Drainage Area and Discharges

The spreadsheet uses the relation between drainage area and flow developed in item 3 to calculate flow throughout the watershed where measured data are not available.

5. Reaches and Elements

The spreadsheet lists the model reaches that were selected, and details the layout of elements. The columns for width, depth, characteristic flow, velocity, and Leopold equation constants are described by items 7 and 9.

6. Width and Depth Versus Drainage Area

The spreadsheet lists characteristic width, depth, and drainage area for those few reaches for which data is available. The plots of width and depth versus drainage area were used to select widths and depths for some reaches for which no data were available.

7. Width and Depth Determinations

The spreadsheet details the selection of widths and depths for the 26 model reaches. Some of the data were obtained from field measurements and some by measuring stream widths on 1:24,000

DRGs. Width to depth ratios were calculated for the available field data and used to estimate some depths. The relationships of item 6 were also used to select widths and depths.

8. Flow Calibration

The spreadsheet was used to perform a preliminary flow calibration for the model using upstream, tributary, and point source flows. Distributed flow was varied to obtain calibration. A characteristic flow was calculated for each reach at the same point in each reach for which widths and depths were estimated. The incremental flow is simply the distributed flow times the reach length.

9. Reaches and Elements

The columns containing widths and depths were filled in using data from item 7 and the characteristic flow from item 8. Velocity and the constants for the Leopold equations were then calculated. The Leopold equation exponents suggested by Leopold for "ephemeral" and "158 streams" were used without change and the coefficients and depth constant were obtained by calibration to the calibration run widths and depths. Where it was felt necessary to hold both width and depth constant (most of the main channel of Bayou Plaquemine Brule and the lowest reach of Bayou Blanc), the depth constant was set to the desired depth and the velocity exponent was set to 1.

10. Model Output File and Charts

At this point the model input file was created and the model run. The model output confirmed the preliminary flow calibration and plots of flow versus stream distance from mouth were printed. The measured and estimated (calculated) flow were overlaid on the flow plots to demonstrate calibration.

3.3.2 Water Quality Calibration

The basic premise governing water quality calibration and projection is that the dominant oxygen demanding load in the watershed at low flow is from an accumulation of benthic material washed into the streams during periods of higher flow. This load is exerted as sediment oxygen demand and as resuspension of material from the bottom. The QUALTX model can accommodate both a baseline SOD and a steady state SOD from the settling of CBOD and NBOD. It is suspected that in most of the Mermentau Basin the accumulation of benthic material is considerable and that the settling of BOD at low flow as simulated by the model does not significantly alter the sediment oxygen demand. SOD was therefore not tied to settling in the execution of this model.

1. UBOD Plots

- a. The Church Point survey report did not include the calculation of ultimate BODs, so they were recreated from lab data (samples 5-CP-1, 2, 7, 8, 13, 14, 19, 20, 25, 26, 31, and 32). UCBODs were also calculated for Bayou Plaquemine Brule at Egan (samples AA02613 and AA03085).
- b. The initial DO for samples 31 and 32 was over saturation and the amount of oversaturation was deducted from the suppressed and non-suppressed BOD data and the UBODs recalculated as 31* and 32*. The recalculated UBODs were used in place of the original UBODs.
- c. It appears that the nitrification suppressant failed in the running of suppressed BOD for samples 5-CP-7 and 8, the Church Point POTW. The non-suppressed BOD results were analyzed using GSBOD to obtain UBODs of 66.5 and 72.4.

2. Church Point/Crowley/Rayne Model Rates and Concentrations

- a. The spreadsheet gives modeling rates used in the Church Point, Crowley, and Rayne wasteload allocations. The numbers are averages of the rates that coincide with each of the BPB TMDL reaches. These rates were used as a starting point for calibration in the affected reaches.
- b. The POTW effluent and headwater BOD and DO concentrations used by the Church Point/Crowley/Rayne models are also listed and are used in the Bayou Plaquemine Brule TMDL.

3. Water Quality Model Input

The spreadsheet lists the input for calibration of the water quality model.

a. Advective dispersion

QualTx uses the equation $D_L = 18.53nuh^{5/6}$ for advective dispersion, where n is Mannings "n", u is the velocity in m/s, and h is the depth in m. In order to input dispersion rates of the order of magnitude that we are accustomed to in Louisiana, artificially high values of n must be input. The spreadsheet shows the values of n and the resulting dispersion rates used for non-tidal reaches. Advective dispersion did not play a significant role in the calibration.

b. Tidal dispersion

The tidal reaches are the bottom reach of Bayou Blanc and all of Bayou Plaquemine Brule except reach 1. A tidal dispersion rate calculated for Bayou Queue de Tortue based on a 1992 survey was used. That dispersion rate was calculated for a reach of Bayou Queue de Tortue from RM 22.5 to 30.7. The midpoint of that reach is 31 miles from the top of Lake Arthur and tidal dispersion in Bayou Plaquemine Brule was calibrated to the same value at the same distance from Lake Arthur. Values for the other reaches were obtained by interpolation with respect to stream distance from the top of the tidal portion of the bayou where dispersion is zero.

c. Lower boundary conditions

Lower boundary conditions were taken from the Mermentau River ambient monitoring station at Mermentau for the months of July through October, 1989 – 1993. UNBOD was calculated as $TKN \times 4.3$ and UCBOD was estimated from TOC. A UCBOD/TOC ratio of 0.6 was obtained from data from the 1993 Bayou Plaquemine Brule survey at Crowley.

d. Reaeration rates

Except for those reaches where rates were measured, reaeration rates were calculated using the Louisiana Equation.

e. Decay rates, settling rates, and SOD rates

Initial rates were taken from existing models for Bayou Plaquemine Brule at Church Point and Crowley and Bayou Blanc at Rayne, and adjusted to calibrate to measured values of CBOD, NBOD, and DO.

f. Incremental nonpoint (with flow)

A number of measurements of CBOD/NBOD/DO were made of ricefield runoff during the Rayne survey. An average of these values was used to represent incremental nonpoint water quality.

g. Chlorophyll

The modeling program can calculate algal production from values of chlorophyll a. In two portions of the watershed where there was evidence of algal production (elevated pH and DO near or in excess of saturation) values of chlorophyll a were input to simulate that production. In one of those two cases a measured value of chlorophyll was available.

h. Nonpoint (without flow)

Nonpoint CBOD and NBOD was added to calibrate the model. This loading is assumed to represent the combined impact of resuspension of benthic material and other loading entering the water column without an associated flow.

4. Calibration Data

The two spreadsheets titled "Calibration Data" contain measured TKN, UCBOD, UNBOD, and DO data from three intensive surveys, the ambient monitoring site at Estherwood, and an assessment site at Egan. The model was calibrated to this data.

5. Model Output File and Charts

The model was calibrated to the data of item 4 as demonstrated by the accompanying charts. The item 4 data actually used (Data as Input to Calibration Plots) is listed prior to the charts.

3.3.3 Flow Projections

At low flow conditions the twelve reaches of Bayou Plaquemine Brule below the City of Church Point have virtually no surface slope and are influenced by wind tides in Lake Arthur. The velocity in these reaches at calibration conditions ranged from .025 to .002 meters per second. It is therefore expected that the width and depth of the bayou in these reaches will not change between calibration and winter and summer low flow conditions. The equations that control width and depth have been adjusted to reflect these conditions. The equations are:

$$h = cQ^d + e \quad v = aQ^b \quad w = Q/vh$$

To fix the width and depth, we set $c = 0$, $e =$ the depth, $b = 1$, and $a = 1/wh$. The equations for width and depth then become:

$$h = e \quad w = Q/aQh = 1/ae$$

The same relationship was used for the small lake through which Bayou Blanc flows. The level of this lake is controlled by a culvert at the sampling site below the lake.

The tributaries and Bayou Plaquemine Brule above Church Point are represented as free flowing waterbodies with width and depth varying with flow. The value of e is the estimated depth of the stream at zero flow, and d and b were set at the values obtained by Leopold for "ephemeral streams" except for Bayou Wikoff for which d and b were set to Leopold's exponents for "158 streams". The coefficients a and c were obtained by calibration.

3.3.4 Water Quality Projections

1. Reference Stream Nonpoint Loading

It is the purpose of the projections to produce wasteload allocations (WLAs) for point source dischargers and percent reductions of anthropogenic loading (LAs) for nonpoint sources. In order to differentiate anthropogenic from background nonpoint some measure of background loading is needed. Toward that end, the available calculated loading from the reference stream program is listed.

2. Bayou Plaquemine Brule Calibration Benthic Loading

Also needed for the calculation of percent reduction of nonpoint is the calibration benthic loading, calculated for each reach in this spreadsheet.

3. Headwater and Facility Projection Flows, Concentrations, and Loading

a. Facilities were input at expected flow plus a 20% allowance for growth and a margin of safety (MOS). The headwater flows were input at 0.1 cfs for summer low flow conditions to keep the model from crashing. A summer critical headwater flow of 0.1 cfs was used for all headwaters except those with a zero drainage area.

b. Bayou Plaquemine Brule at the Church Point USGS Site 080102 (drainage area $48.2 \text{ mi}^2 = 124.84 \text{ km}^2$) is correlated with Bayou des Cannes at the Eunice USGS Site 0801000 (drainage area = 131 mi^2) per "Low-Flow Characteristics of Louisiana Streams", LA DOTD Office of Public Works and DOI USGS p. 82. The Bayou des Cannes average monthly 7Q10 for December to February is: December 0.3 cfs, January 2.4 cfs, February 3.5 cfs, average 2.4 cfs. The December – February flow at Church Point is estimated to be $2.4 \text{ cfs} \times 48.2/131 = 0.88 \text{ cfs}$. The wintertime default 1.0 cfs was used for Bayou Plaquemine Brule at Church Point as per the Louisiana Technical Procedures.

c. The model was then run to obtain summer and winter depths and velocities for the recalculation of reaeration.

4. Reaeration data for Projections

The Louisiana equation was used to calculate reaeration for the summer and winter runs.

5. Summer Projection Benthic Loading

This spreadsheet calculates the percent reduction of summertime anthropogenic loading corresponding to the input SOD and nonpoint NBOD and CBOD that allowed the criteria to be met. All calculations were done at 20°C so that the differing temperatures for calibration and projection would not bias the results. The percent reduction of anthropogenic loading is defined as $[(\text{calibration loading} - \text{background loading}) - (\text{projection loading} - \text{background loading})] / (\text{calibration loading} - \text{background loading})$. By trial and error, the point source and nonpoint source reductions needed to project that each reach would meet dissolved oxygen criteria were determined. A nonpoint load reduction of about 50 percent in the tributaries and the upper reaches of Bayou Plaquemine Brule and about 30 percent in the main channel of the Bayou were needed to project that criteria would be met.

6. Winter Projection Benthic Loading

The above process was repeated for winter conditions using the same percent reduction of nonpoint that was found to be needed in the summer.

7. Headwater and Facility Projection Flows, Concentrations, and Loading

The point source concentrations needed to meet DO criteria were entered in the spreadsheet and point source and headwater loads were calculated.

8. Lower Boundary Conditions

Lower boundary conditions were calculated from current data from the Mermentau River ambient monitoring station at Mermentau for the winter (December – February) and summer (March – November) months. UNBOD was calculated as $TKN \times 4.3$ and UCBOD was estimated from TOC. A UCBOD/TOC ratio of 0.6 was obtained from data from the 1993 Bayou Plaquemine Brule survey at Crowley.

9. Model Output File and Charts

The model output and charts for summer and winter projections are provided. In addition, point source concentrations were backed off by one level of treatment as defined by the Louisiana Technical Procedures and additional runs made. Except where the point source concentrations were already at secondary, the additional runs violate criteria in both summer and winter.

10. Benthic loading for Summer No-load Projection

The estimated natural background benthic loading for the summer no-load projection run is listed. The calibration CBOD, NBOD, and SOD are reduced by the ratio of calibration benthic load to natural background benthic load to get the no (man-made) load CBOD, NBOD, and SOD, except that zero CBOD and NBOD were not allowed. Where the calibration CBOD or NBOD were zero a small load was input and the SOD adjusted downward so that the sum of the natural background CBOD, NBOD, and SOD equaled the total background benthic.

11. Reaeration Data for Summer No-load Projections

The reaeration rates were recalculated at stream flow conditions with point source discharges removed using the Louisiana equation.

12. Model output charts

Model output charts for the summer no-load projection are provided. The projected dissolved oxygen is above 5.0 mg/l in the watershed except for a short lower reach of Bayou Blanc.

13. Summer and Winter TMDL Calculations

Land use in the Bayou Plaquemine Brule watershed is fairly homogeneous, comprising principally rice farming, row crops, and pasture. TMDLs have therefore been calculated for the entire watershed. The spreadsheet sums loading from headwaters, point sources, nonpoint not associated with flow, and SOD.

3.3.5 Minimum Projection Dissolved Oxygen

Table 4 lists the minimum dissolved oxygen levels projected for each reach at summer and winter critical conditions.

Table 4. Minimum Dissolved Oxygen Levels

MINIMUM DISSOLVED OXYGEN LEVELS SUMMER AND WINTER PROJECTIONS					
REACH NUMBER	ID CODE	SUMMER PROJECTION		WINTER PROJECTION	
		ELEMENT NUMBER	CONCENTRATION (mg/L)	ELEMENT NUMBER	CONCENTRATION (mg/L)
1	PB	13 - 14	4.84	20	6.62
2	PB	21	4.30	21	6.39
3	PB	29	3.11	32 - 33	5.57
4	PB	94	4.20	81	6.81
5	PB	102	3.31	102	7.30
6	PB	103	3.27	104	6.95
7	AG	105	3.04	105	5.22
8	AB	140	3.39	140	6.96
9	PB	142	3.35	142	6.85
10	SG	145	3.74	145	8.23
11	SB	155 - 157	3.20	171 - 177	7.71
12	BW	204	3.72	204	7.30
13	PB	207	3.15	208	6.19
14	CG	210	3.13	209	5.35
15	PB	228	3.35	247	4.89
16	PB	255	3.62	255	5.00
17	BB	311	4.59	287	6.85
18	BB	315	3.71	315	7.49
19	BB	317	3.66	319 - 320	7.44
20	BB	321	3.73	373	6.62
21	BB	386	3.12	387	5.26
22	PB	390	3.71	393	5.42
23	CT	401	3.03	404	5.47
24	PB	405	3.74	432	5.20
25	PB	436 - 437	3.54	435	5.03
26	PB	439	3.66	439	5.32

3.3.6 Sensitivity Analysis

Sensitivity analysis was performed for the summer critical projection, with the following results:

Table 5. Summer Projection Sensitivity Analysis

Parameter	Variation of parameter	
	- 30 % or 2°C	+ 30 % or 2°C
	Percent change in minimum DO	
Reaeration	- 51.4	+ 31.6
Depth	- 32.1	+16.5
SOD	+ 23.2	- 24.1
Temperature	+ 16.9	- 14.4
K _d	+ 6.1	- 5.1
K _n	+ 5.0	- 4.2

Since reaeration and SOD are both sensitive to depth, we can say that the three most sensitive parameters are depth related. It is especially important, therefore, that stream hydrologic data be reasonably good. Data from the sensitivity runs may be found in the Bayou Plaquemine Brule summer projection sensitivity spreadsheet.

4. TMDLs and Allocations

Land use in the Bayou Plaquemine Brule watershed is fairly homogeneous, comprising principally rice farming, row crops, and pasture. TMDLs have therefore been calculated for the entire watershed. Table 6 lists the WLAs and LAs as total BOD and gives the percent reduction of man-made nonpoint loading that is required. Non-point loading is the sum of UCBOD, UNBOD, and SOD. Table 7 lists the specific point source allocations in mg/l.

Table 6. Total Maximum Daily Loads

	Summer Season (Mar – Nov) TMDLs			Total (lbs/day)	% of Total
	UCBOD (lbs/day)	UNBOD (lbs/day)	MOS (lbs/day)		
Church Point POTW	153	57.4	52.7	263	
Atwood Acres STP	8.8	8.3	4.3	21.4	
Acadian Fine Foods STP	9.6	9.0	4.7	23.3	
North Rayne POTW	13.2	12.4	6.4	32.0	
Crowley High School POTW	4.6	4.3	2.2	11.1	
Crowley POTW	237	443	170	850	
Rayne POTW	288	269	139	696	
Estherwood POTW	7.7	14.4	5.5	27.6	
Total point source allocations (WLA)	722	818	385	1,924	9.1
	UCBOD (lbs/day)	UNBOD (lbs/day)	SOD (lb/day)	Total (lbs/day)	
Nonpoint Load	9,949	6,167	3,099	19,216	
Headwater Load	53	34		87	
Load Allocation (LA)	10,002	6,201	3,099	19,303	90.9
Percent Reduction of man-made nonpoint				50	
Nonpoint source margin of safety (MOS)				0	
Total maximum daily load (TMDL)				21,227	100

Winter Season (Dec – Feb) TMDLs

	<u>UCBOD (lbs/day)</u>	<u>UNBOD (lbs/day)</u>	<u>MOS (lbs/day)</u>	<u>Total (lbs/day)</u>	<u>% of Total</u>
Church Point POTW	307	287	148	742	
Atwood Acres STP	26.5	24.8	12.8	64.2	
Acadian Fine Foods STP	14.5	13.5	7.0	34.9	
North Rayne POTW	19.8	18.5	9.6	48.0	
Crowley High School POTW	13.8	12.9	6.7	33.4	
Crowley POTW	474	443	229	1,146	
Rayne POTW	288	269	139	696	
Estherwood POTW	23.1	21.6	11.2	55.9	
Total point source allocations (WLA)	1,166	1,090	564	2,820	13.1
	<u>UCBOD (lbs/day)</u>	<u>UNBOD (lbs/day)</u>	<u>SOD (lb/day)</u>	<u>Total (lbs/day)</u>	
Nonpoint Load	9,978	6,194	1,661	17,832	
Headwater Load	530	339		869	
Load Allocation (LA)	10,508	6,533	1,661	18,701	86.9
Percent Reduction of man-made nonpoint				50	
Nonpoint source margin of safety (MOS)				0	
Total maximum daily load (TMDL)				21,521	100

Table 7. Point Source Allocations

Facility	Flow (mgd)	Permit limitations (CBOD ₅ /NH ₃ -N/DO)		Projected limits (CBOD ₅ /NH ₃ -N/DO)	
		Summer	Winter	Summer	Winter
Church Point POTW	0.80	10/2/6	10/10/6	10/2/5	20/10/6
Atwood Acres STP	.046	20/-/-	---	10/5/5	30/15/6
Acadian Fine Foods STP	.025	20/-/-	---	20/10/2	30/15/2
North Rayne POTW	.020	20/-/-	---	20/10/2	30/15/2
Crowley High School POTW	.034	30/-/-	---	10/5/5	30/15/6
Crowley POTW	2.47	5/2/5	10/2/5	5/5/5	10/5/6
Rayne POTW	1.50	10/-/-	---	10/5/5	10/5/6
Estherwood POTW	.080	10/-/-	---	10/10/2	30/15/2

4.1 TMDL Calculations

An outline of the TMDL calculations is provided to assist in understanding the calculations in the Appendices.

- The natural background benthic loading was estimated from reference stream NBOD, CBOD, and SOD data.
- The calibration anthropogenic (man-made) benthic loading was determined as follows:
 - Calibration non-point CBOD and NBOD (resuspension), and SOD were summed for each reach as gm/m²d to get the total calibration benthic loading.
 - The natural background benthic loading was subtracted from the total calibration benthic loading to get the total anthropogenic (man-made) calibration benthic loading.
- Projection runs were made with:
 - Point sources represented at 125% of design flow (based on Department of Health design criteria) to provide an explicit 20% margin of safety for point source loading.
 - Headwater flows at seasonal 7Q10 or 0.1(summer)/1.0(winter) cfs, whichever was greater.
 - Headwater concentrations of CBOD, NBOD, and DO at calibration levels.
- For each reach, the non-point CBOD and NBOD (resuspension), SOD, and point source limitations were adjusted to bring the projected in-stream dissolved oxygen in compliance with criteria. No

additional explicit margin of safety was employed for non-point loading. The loading capacity and percent reduction of non-point were calculated as follows:

- The total projection benthic loading at 20°C was calculated as the sum of projection NBOD, CBOD, and SOD expressed as gm/m²d.
- The natural background benthic loading was subtracted from the total projection benthic loading to get the total anthropogenic (man-made) projection benthic loading.
- The total anthropogenic projection benthic loading was subtracted from the total calibration anthropogenic benthic loading and that number divided by the total calibration anthropogenic benthic loading to obtain the percent reduction of non-point loading needed to achieve the in-stream dissolved oxygen criteria.
- The total projection benthic loading for each reach was calculated as follows:
 - The projection SOD at 20°C was adjusted to stream critical temperature.
 - The projection CBOD, NBOD, and SOD were summed to get the total benthic loading at stream temperature critical in lb/d for each reach.
- The total stream loading capacity at stream critical temperature was calculated as the sum of:
 - Headwater CBOD and NBOD loading in lb/d.
 - Projection benthic loading for all reaches of the stream in lb/d.
 - Total point source CBOD and NBOD loading in lb/d.
 - The facility margin of safety.

The TMDL for the Bayou Plaquemine Brule watershed was set equal to the total stream loading capacity.

5. Conclusions

A TMDL for dissolved oxygen has been developed for the Bayou Plaquemine Brule Watershed based on hydrologic and water quality data available as of March, 1999. It is projected that compliance with the existing dissolved oxygen criteria of 3.0 mg/l will require a 50 percent reduction of man-made nonpoint loading in the watershed and more stringent limitations for three point source dischargers. Several dischargers are projected to require slightly less stringent limitations. The current permit limitations and projected levels of treatment are:

Facility	Flow (mgd)	Permit limitations (BOD ₅ /NH ₃ -N/DO)		Projected limits (BOD ₅ /NH ₃ -N/DO)	
		Summer	Winter	Summer	Winter
Church Point POTW	0.80	10/2/6	10/10/6	10/2/5	20/10/6
Atwood Acres STP	.046	20/-/-	---	10/5/5	30/15/6
Acadian Fine Foods STP	.025	20/-/-	---	20/10/2	30/15/2
North Rayne POTW	.020	20/-/-	---	20/10/2	30/15/2
Crowley High School POTW	.034	30/-/-	---	10/5/5	30/15/6
Crowley POTW	2.47	5/2/5	10/2/5	5/5/5	10/5/6
Rayne POTW	1.50	10/-/-	---	10/5/5	10/5/6
Estherwood POTW	.080	10/-/-	---	10/10/2	30/15/2

LDEQ will work with other agencies such as local Soil Conservation Districts to implement agricultural best management practices in the watershed through the 319 programs. LDEQ will also continue to monitor the waters to determine whether standards are being attained.

In accordance with Section 106 of the federal Clean Water Act and under the authority of the Louisiana Environmental Quality Act, the LDEQ has established a comprehensive program for monitoring the quality of the state's surface waters. The LDEQ Surveillance Section collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface water monitoring program are to determine the quality of the state's surface waters, to develop a long-term data base for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface water monitoring program is used to develop the state's biennial 305(b) report (*Water Quality Inventory*) and the 303(d) list of impaired waters. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

The LDEQ has implemented a watershed approach to surface water quality monitoring. Through this approach, the entire state is sampled over a five-year cycle with two targeted basins sampled each year. Long-term trend monitoring sites at various locations on the larger rivers and Lake Pontchartrain are sampled throughout the five-year cycle. Sampling is conducted on a monthly basis or more frequently if necessary to yield at least 12 samples per site each year. Sampling sites are located where they are considered to be representative of the waterbody. Under the current monitoring schedule, targeted basins follow the TMDL priorities. In this manner, the first TMDLs will have been implemented by the time the first priority basins will be monitored again in the second five-year cycle. This will allow the LDEQ to determine whether there has been any improvement in water quality following implementation of the TMDLs. As the monitoring results are evaluated at the end of each year, waterbodies may be added to or removed from the 303(d) list. The sampling schedule for the first five-year cycle is shown below.

- 1998 - Mermentau and Vermilion-Teche River Basins
- 1999 - Calcasieu and Ouachita River Basins
- 2000 - Barataria and Terrebonne Basins
- 2001 - Lake Pontchartrain Basin and Pearl River Basin
- 2002 - Red and Sabine River Basins

The Atchafalaya and Mississippi Rivers will be sampled continuously. The Mermentau and Vermilion-Teche Basins will be sampled again in 2003.

6. List of References

Water Quality Evaluation Commission. Updated December 3, 1990. *QUAL-TX User's Manual, Version 3.3*, Austin, TX: Water Quality Standards and Evaluation Commission, Texas Water Commission.

Water Quality Evaluation Commission, November, 1990. *Wasteload Evaluation Methodology*, Austin, TX: Water Quality Standards and Evaluation Commission, Texas Water Commission.

Rudolph, Mark A. Notes for overlay plots in QUAL-TX. Austin, TX: Water Quality Evaluation Commission, Water Quality Standards and Evaluation Commission, Texas Water Commission.

Greenberg, Arnold E., Lenore S. Clesceri, and Andrew D. Eaton. 1992. Standard Methods For the Examination of Water and Wastewater, 18th Edition. 1992. American Public Health Association, American Water Works Association, and Water Environment Federation.

Louisiana Department of Environmental Quality. 1996. State of Louisiana Water Quality Management Plan, Volume 5, Part B, *Water Quality Inventory*. LA DEQ Office of Water Resources, Water Quality Management Division, Baton Rouge, Louisiana, p. A-32.

Louisiana Department of Environmental Quality. 1998. Environmental Regulatory Code: Part IX. Water Quality Regulations. Baton Rouge, LA: LA DEQ Office of Water Resources, Water Quality Management Division. pp. 179.

Waldon, Michael G., Ph.D., *Louisiana Total Maximum Daily Load Technical Procedures, 1994*, CLIWS-WQR 91.10. March, 1994 (revised). Center of Louisiana Inland Water Studies (CLIWS), Department of Civil Engineering, University of Southwestern Louisiana, for the LA Department of Environmental Quality, Office of Water Resources, Water Pollution Control Division, Engineering Section.

Kniffen, Fred B., and Sam Bowers Hilliard. 1988. Louisiana, Its Land and People. Baton Rouge and London. Louisiana State University Press.

Forbes, Max J., Jr. 1980. *Low-Flow Characteristics of Louisiana Streams*. Baton Rouge, LA: United States Department of the Interior and Louisiana Department of Transportation and Development, Office of Public Works, Technical Report No. 22.

Sloss, Raymond. Reprinted 1991. *Drainage Areas of Louisiana Streams*. Baton Rouge, LA: U.S. Geological Survey and Louisiana Department of Transportation and Development.

State of Louisiana Department of Health and Human Resources. October 20, 1984. Sanitary Code, State of Louisiana, Chapter XIII Sewage and Refuse Disposal. Baton Rouge, LA.

Leopold, Luna B., and Thomas Maddock, Jr. 1953. *The Hydraulic Geometry of Stream Channels and Some Physiographic Implications*. Washington, D.C.: United States Government Printing Office. Professional Paper No. 252.

Lee, Fred N., and Duane Everette. *A Compilation of 7 Day, 10-Year Discharges for 363 Louisiana Streamflow Sites*. Baton Rouge, LA: Prepared for the Louisiana Department of Environmental Quality, Water Pollution Control Division, Engineering Section.

Lee, Fred N., Duanne Everette, and Max Forbes. March 31, 1997. *Lowflow Statistics from the USGS Database Through 1993*. Baton Rouge, LA: Prepared for the Louisiana Department of Environmental Quality, Water Pollution Control Division, Engineering Section. pp. 103-104, 106.

Asuquo, Gibson E. April 8, 1994. *Survey Report for the Intensive Survey of Bayou Plaquemine Brule at Crowley, August 29, 1993 – September 2, 1993 (Final)*. Baton Rouge, LA: Office of Water Resources, Louisiana Department of Environmental Quality.

Engineering Section. April, 1991. *Survey Report for the Bayou Plaquemine Brule at Church Point Intensive Survey, October 2 – 5, 1989 (Final)*. Baton Rouge, LA: Water Pollution Control Division, Louisiana Department of Environmental Quality. Report No. DEQ-WPCD-89.03.

Rogers, Madeline. April 25, 1991. *Wasteload Allocation for the Bayou Plaquemine Brule at Church Point, Louisiana (Draft)*. Baton Rouge, LA: Center for Louisiana Inland Water Studies, Department of Civil Engineering for the Louisiana Department of Environmental Quality. Report No. CLIWS-WLA 90.37.

Waldon, Michael Gene, Ph.D, P.E. April 15, 1996 (Revised May, 1997). *Bayou Plaquemine Brule TMDL including WLA for Crowley*. Center for Louisiana Inland Water Studies, Department of Civil Engineering for the Louisiana Department of Environmental Quality, Water Pollution Control Division, Engineering Section. Report No. CLIWS-WQR 95.06.

Engineering Section. July, 1991. *Survey Report for the Bayou Plaquemine Brule at Crowley Intensive Survey, September 18-21, 1989 (Final)*. Baton Rouge, LA: Water Pollution Control Division Office of Water Resources, Louisiana department of Environmental Quality. Report No. DEQ-WPCD-89.02.

Pilione, Tina. March 25, 1994. *Bayou Blanc, City of Rayne, Intensive Survey Report Conducted July 18-23, 1993 (Final)*. Baton Rouge, LA: Louisiana Department of Environmental Quality, Office of Water Resources, Engineering Section.

Smythe, E. deEte. September 30, 1996. *Simulating Longitudinal Dispersion Using a Conservative Dye Indicator*. Prepared for the Louisiana Department of Environmental Quality, Water Pollution Control Division, Engineering Section. Report No. CLIWS-WQR 93.01.

Reed, Sherwood C., Ronald Crites, and E. Joe Middlebrooks. 1995. Natural Systems for Waste Mangement and Treatment, Second Edition. McGraw-Hill.

Thoman, Robert V., and John A. Mueller. 1987. Principles of Surface Water Quality Modeling and Control. Manhattan College: Harper Collins Publishers.

USGS Discharge Database

LADEQ Ambient Network Database

LADEQ Assessment network Database

Permit Tracking System (PTS)

Permit Files

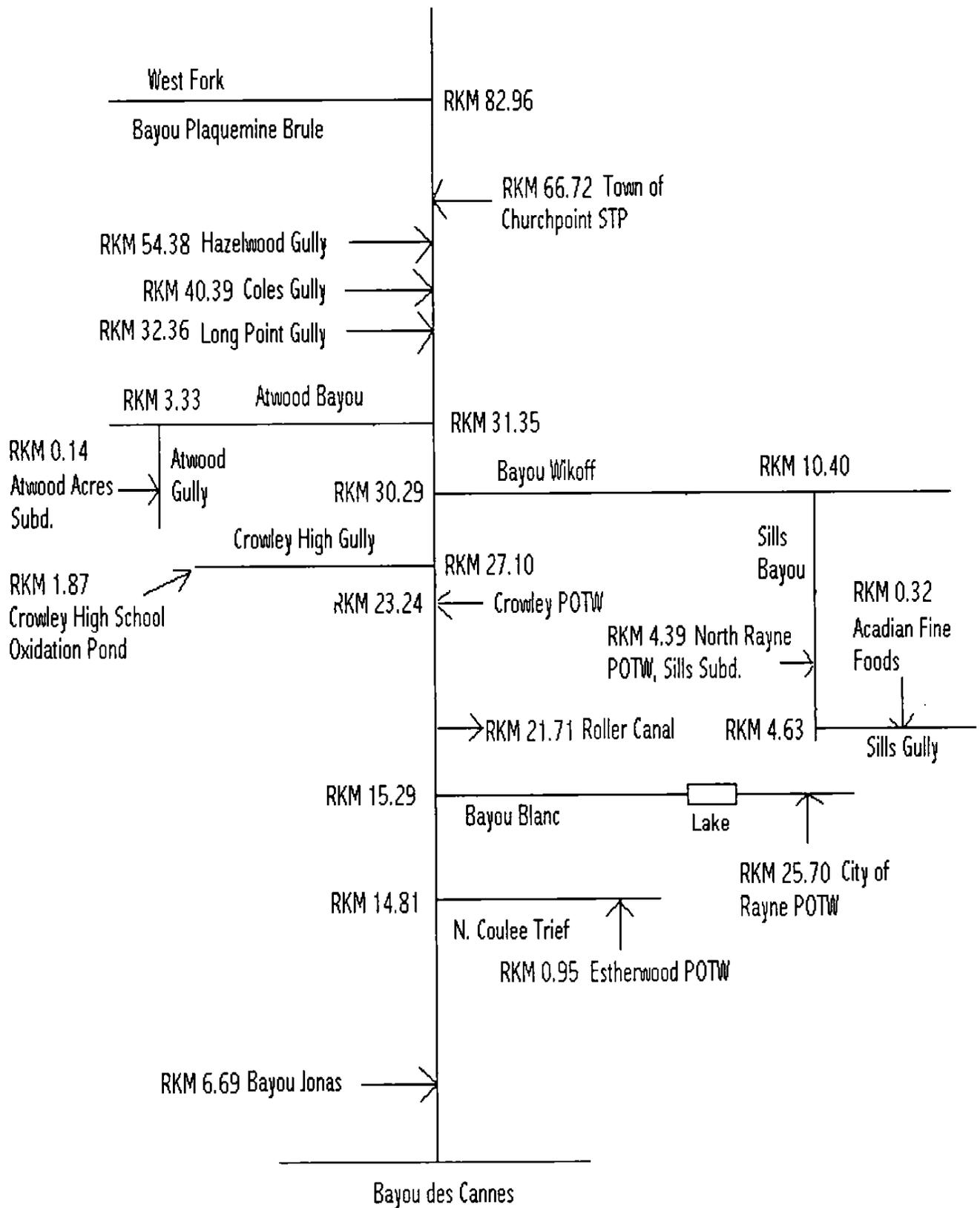
DMR Database (Stephanie Braden)

Bayou Plaquemine Brule Watershed TMDL
Subsegment 0502
W.C. Berger, Jr., J. Carney, R.K. Duerr
Originated: March 26, 1999
Revised: July 30, 1999, February 9, 2000, May 8, 2000 / RKD

APPENDIX A – MODEL SCHEMATIC

Vector.doc - Bayou Plaquemine Brule Vector Diagram

Bayou Plaquemine Brule Vector Diagram



APPENDIX B – HYDROLOGIC CALIBRATION

Bpbdas.xls - Drainage Areas for the Bayou Plaquemine Project

AvsQ.xls - Drainage Area versus Flow

AvsQ.xls - Net Q vs A including Bayou Blanc at Highway 13

WshedQs.xls - Drainage Areas and Discharges

Reach13.xls - Reaches and Elements

W&DvsA.xls - Width and Depth versus Drainage Area

W&DvsA.xls/CombW-DA - Width vs Drainage Area for Sites on Bayou Plaquemine Brule and Bayou Blanc

W&DvsA.xls/CombD-DA - Depth vs Drainage Area for Sites on Bayou Plaquemine Brule and Bayou Blanc

W&D.xls - Width and Depth Determinations

FlowCal2.xls - Flow Calibration

AG_Qcal.xls - Atwood Gully/Atwood bayou Flow Calibration

SG_Qcal.xls - Sills Gully/Sills Bayou/Bayou Wikoff Flow Calibration

CHG_Qcal.xls - Crowley High Gully Flow Calibration

BB_Qcal.xls - Bayou Blanc Flow calibration

NCT_Qcal.xls - North Coulee Trief Flow Calibration

Drainage Areas for the Bayou Plaquemine Brule Project

Waterbody Location	Drainage Area (km ²)
West Fork Bayou Plaquemine Brule (@ mouth)	5.23
Bayou Plaquemine Brule (@ Church Point POTW) (by interpolation)	115.47
Bayou Plaquemine Brule (@ mouth of Hazelwood Gully)	212.9
Bayou Plaquemine Brule (@ mouth of Bideman Gully)	255.17
Bayou Plaquemine Brule (@ Hwy 367, point of Q/cross section)	257.51
Bayou Plaquemine Brule (@ the mouth of Cole Gully) (by interpolation)	341.87
Bayou Plaquemine Brule (@ the mouth of Long Point Gully)	424.27
Bayou Plaquemine Brule (@ the mouth of Atwood Bayou) (by interpolation)	431.77
Bayou Plaquemine Brule (@ mouth of Bayou Wikoff)	654.31
Bayou Plaquemine Brule @ the mouth of Crowley High Gully	675.08
Bayou Plaquemine Brule (upstream of Crowley POTW) km2 (by interpolation)	707.27
Bayou Plaquemine Brule (@ mouth of Roller Canal) (by interpolation)	711.02
Bayou Plaquemine Brule (above Bayou Blanc) (by interpolation)	752.81
Bayou Plaquemine Brule (below Bayou Blanc) (by interpolation)	844.84
Bayou Plaquemine Brule (@ mouth of N. Coulee Trief) (by interpolation)	847.51
Bayou Plaquemine Brule (@ RKM 12.0) (by interpolation)	884.67
Bayou Plaquemine Brule (@ mouth of Bayou Jonas) (by interpolation)	919.25
Bayou Plaquemine Brule (@ mouth)	966.25
Hazelwood Gully (@ mouth)	34.89
Bideman Gully (@ mouth)	21.47
Cole Gully (@ lat 30 18 01 longitude 92 20 15)	56.46
Cole Gully (@ mouth of Prather Gully)	56.15
Cole Gully (@ mouth of Gumpoint Gully)	42.63
Cole Gully (@ mouth)	58.02
Gumpoint Gully (@ mouth)	11.97
Gumpoint Gully (@ point of Q/cross section measurement)	8.02
Prather Gully (@ mouth)	12.76
Prather Gully (@ Hwy 367, point of Q/cross section measurement)	10.04
Long Point Gully (@ mouth)	86.35
Long Point Gully (@ point of Q/cross section measurement)	79.85

Atwood Acres receiving ditch	0
Atwood Bayou (upstream of receiving ditch/unnamed trib. Confluence)	1.65
Atwood Bayou (@ mouth)	4.59
Sills Gully (upstream of Acadian Fine Foods discharge)	29.17
Sills Gully (@ mouth)	38.73
Sills Gully (@ mouth)	30.34
Sills Bayou (above Sills Gully)	4.64
Sills Bayou (upstream of N. Rayne POTW Sills Subd.)	35.1
Sills Bayou (@ mouth)	38.73
Bayou Wikoff (above Sills Bayou)	148.07
Bayou Wikoff (@ point of Q/cross section measurement on parish road bridge)	202.31
Bayou Wikoff (@ mouth)	219.48
Crowley High Gully (upstream of Crowley High School)	0
Crowley High Gully (@ mouth)	0.85
Bayou Blanc (upstream of the City of Rayne POTW)	1.83
Bayou Blanc (@ top of Bayou Blanc Lake)	4.27
Bayou Blanc (@ Site 8 on parish road bridge)	41.83
Bayou Blanc (@ Hwy 13 bridge)	47.83
Bayou Blanc (@ mouth)	91.58
N. Coulee Trief (upstream of the Village of Estherwood POTW)	17.37
N. Coulee Trief (@ mouth)	18.87

Bayou Plaquemine Brule Watershed

Drainage area versus flow

Dataset # 1 with Bayou Blanc at highway 13:

Location	Survey & Date	Area (km ²)	Flow (cfs)	Flow (cms)	POTW (cfs)	POTW (cms)	Net Flow (cms)
Long Point Gully**	BPB @ Crowley - 8/29-9/2/1993	79.85	1.840	0.05207			0.05207
Cole Gully**	BPB @ Crowley - 8/29-9/2/1993	38.9	2.480	0.07018			0.07018
Bayou Plaquemine Brule @ hwy 367 incl. Churchpoint POTW**	BPB @ Crowley - 8/29-9/2/1993	257.51	4.440	0.12565	0.01926		0.10639
Bayou Blanc @ hwy 13 incl. Rayne POTW**	BPB @ Crowley - 8/29-9/2/1993	47.83	1.460	0.04132	0.04400		-0.00268
Bayou Wilkoff incl. N. Rayne POTW and Acadian Fine Foods***	BPB @ Crowley - 8/29-9/2/1993	202.31	5.450	0.15424	0.00390		0.15034
Bayou Plaquemine Brule above Churchpoint POTW	BPB @ Churchpoint - 10/2-5/1989	115.47	1.100	0.03113			0.03113
Bayou Blanc above Rayne POTW*	Bayou Blanc @ Rayne 7/18-23/1993	1.83	0.641	0.01814			0.01814
Bayou Blanc at top of lake (inc Rayne POTW)*	Bayou Blanc @ Rayne 7/18-23/1993	4.19	3.209	0.09081	2.000	0.05663	0.03418
Bayou Blanc at bottom of lake (inc Rayne POTW)*	Bayou Blanc @ Rayne 7/18-23/1993	5.19	3.519	0.09959	2.000	0.05663	0.04295
Bayou Blanc @ hwy 720 (Rayne Site 7) incl. Rayne POTW*	Bayou Blanc @ Rayne 7/18-23/1993	19.55	3.629	0.10270	2.000	0.05663	0.04607
Gumpoint Gully**	BPB @ Crowley - 8/29-9/2/1993	8.02	0.025	0.00071			0.00071
Prather Gully**	BPB @ Crowley - 8/29-9/2/1993	10.04	0.075	0.00212			0.00212

Dataset # 2 without Bayou Blanc at highway 13:

Location	Survey & Date	Area (km ²)	Flow (cfs)	Flow (cms)	POTW (cfs)	POTW (cms)	Net Flow (cms)
Long Point Gully**	BPB @ Crowley - 8/29-9/2/1993	79.85	1.840	0.05207			0.05207
Cole Gully**	BPB @ Crowley - 8/29-9/2/1993	38.9	2.480	0.07018			0.07018
Bayou Plaquemine Brule @ hwy 367 incl. Churchpoint POTW**	BPB @ Crowley - 8/29-9/2/1993	257.51	4.440	0.12565	0.01926		0.10639
Bayou Wilkoff incl. N. Rayne POTW and Acadian Fine Foods***	BPB @ Crowley - 8/29-9/2/1993	202.31	5.450	0.15424	0.00390		0.15034
Bayou Plaquemine Brule above Churchpoint POTW	BPB @ Churchpoint - 10/2-5/1989	115.47	1.100	0.03113			0.03113
Bayou Blanc above Rayne POTW*	Bayou Blanc @ Rayne 7/18-23/1993	1.83	0.641	0.01814			0.01814
Bayou Blanc at top of lake (inc Rayne POTW)*	Bayou Blanc @ Rayne 7/18-23/1993	4.19	3.209	0.09081	2.000	0.05663	0.03418
Bayou Blanc at bottom of lake (inc Rayne POTW)*	Bayou Blanc @ Rayne 7/18-23/1993	5.19	3.519	0.09959	2.000	0.05663	0.04295
Bayou Blanc @ hwy 720 (Rayne Site 7) incl. Rayne POTW*	Bayou Blanc @ Rayne 7/18-23/1993	19.55	3.629	0.10270	2.000	0.05663	0.04607
Gumpoint Gully**	BPB @ Crowley - 8/29-9/2/1993	8.02	0.025	0.00071			0.00071
Prather Gully**	BPB @ Crowley - 8/29-9/2/1993	10.04	0.075	0.00212			0.00212

* From Bayou Blanc at Rayne model calibration input and output.

** Flow measurement taken during survey. POTW flow from DMRs for period of survey.

*** Flow measurement taken during survey. POTW flow from available DMRs.

Bayou Plaquemine Brule

Reaches and elements

Stream Name	Stream code	Reach no.	From - To (River Km)	Reach length (Km)	No. of Elements	Element Length	Element Numbers	Drainage Area (X) (km ²)	Width (W) (meters)	Depth (D) (meters)	Characteristic flow (cms)	Velocity (mps)	Velocity (fps)	Constants for depth**			Constants for velocity***	
														c	d	e	a	b
Bayou Plaquemine Brule	PB	1	70.20 - 66.20	4.00	20	0.20	1 - 20	115.47	5.5	0.32	0.03600	0.0206	0.0677	0.56	0.36	0.15	0.0639	0.34
Bayou Plaquemine Brule	PB	2	66.2 - 66.0	0.20	1	0.20	21		7.4	0.44	0.06878	0.0212	0.0695	0.00	0.36	0.44	0.3080	1.00
Bayou Plaquemine Brule	PB	3	66.0 - 54.2	11.80	59	0.20	22 - 80	212.9	7.4	0.44	0.08176	0.0252	0.0826	0.00	0.36	0.44	0.3080	1.00
Bayou Plaquemine Brule	PB	4	54.20 - 40.20	14.00	14	1.00	81 - 94	283.85	12.0	0.85	0.11562	0.0112	0.0368	0.00	0.45	0.86	0.0969	1.00
Bayou Plaquemine Brule	PB	5	40.20 - 32.20	8.00	8	1.00	95 - 102	337.92	29.0	2.07	0.15429	0.0026	0.0084	0.00	0.45	2.07	0.0167	1.00
Bayou Plaquemine Brule	PB	6	32.20 - 31.40	0.80	2	0.40	103 - 104	427.18	30.0	2.14	0.19997	0.0031	0.0102	0.00	0.45	2.14	0.0156	1.00
Atwood Gully	AG	7	0.20 - 0.00	0.20	2	0.10	105 - 106	0	3.8	0.21	0.00067	0.0008	0.0028	0.83	0.36	0.15	0.0101	0.34
Atwood Bayou	AB	8	3.40 - 0.00	3.40	34	0.10	107 - 140	4.69	3.9	0.22	0.00324	0.0038	0.0124	0.55	0.36	0.15	0.0265	0.34
Bayou Plaquemine Brule	PB	9	31.40 - 30.30	1.10	2	0.55	141 - 142	434.84	26.0	1.86	0.20321	0.0042	0.0138	0.00	0.45	1.86	0.0207	1.00
Sills Gully	SG	10	0.40 - 0.00	0.40	4	0.10	143 - 146	29.17	4.2	0.24	0.01607	0.0159	0.0523	0.40	0.36	0.15	0.0649	0.34
Sills Bayou	SB	11	4.70 - 0.00	4.70	47	0.10	147 - 193	38.73	4.3	0.25	0.02433	0.0226	0.0743	0.38	0.36	0.15	0.0801	0.34
Bayou Wilkoff	BW	12	11.00 - 0.00	11.00	11	1.00	194 - 204	219.48	10.4	0.32	0.21266	0.0639	0.2096	0.22	0.45	0.21	0.1243	0.43
Bayou Plaquemine Brule	PB	13	30.30 - 27.10	3.20	4	0.80	205 - 208	675.08	35.0	2.50	0.41587	0.0048	0.0156	0.00	0.45	2.50	0.0114	1.00
Crowley High Gully	CG	14	1.90 - 0.00	1.90	19	0.10	209 - 227	0.85	3.8	0.22	0.00162	0.0019	0.0064	0.71	0.36	0.15	0.0172	0.34
Bayou Plaquemine Brule	PB	15	27.10 - 21.70	5.40	27	0.20	228 - 254	711.27	34.3	2.83	0.49961	0.0051	0.0169	0.00	0.45	2.83	0.0103	1.00
Bayou Plaquemine Brule	PB	16	21.70 - 15.30	6.40	32	0.20	255 - 286	753.26	40.2	2.85	0.49961	0.0044	0.0143	0.00	0.45	2.85	0.0087	1.00
Bayou Blanc	BB	17	25.70 - 23.20	2.50	25	0.10	287 - 311	4.27	3.9	0.21	0.09227	0.1127	0.3696	0.14	0.36	0.15	0.2533	0.34
Bayou Blanc Lake	BB	18	23.2 - 22.8	0.40	4	0.10	312 - 315		39.2	0.30	0.09587	0.0082	0.0267	0.00	0.45	0.30	0.0850	1.00
Bayou Blanc Lake	BB	19	22.8 - 22.3	0.50	5	0.10	315 - 320		39.2	0.30	0.09677	0.0082	0.0270	0.00	0.45	0.30	0.0850	1.00
Bayou Blanc	BB	20	22.30 - 6.40	15.90	53	0.30	321 - 373		5.4	0.50	0.10017	0.0371	0.1217	0.80	0.36	0.15	0.0811	0.34
Bayou Blanc	BB	21	6.40 - 0.00	6.40	16	0.40	374 - 389	91.58	20.0	1.43	0.10792	0.0038	0.0124	0.00	0.45	1.43	0.0350	1.00
Bayou Plaquemine Brule	PB	22	15.30 - 14.80	0.50	5	0.10	390 - 394	847.51	50.0	3.57	0.60753	0.0034	0.0112	0.00	0.45	3.57	0.0056	1.00
North Coulee Trief	CT	23	1.00 - 0.00	1.00	10	0.10	395 - 404	18.87	4.0	0.23	0.01336	0.0145	0.0476	0.38	0.36	0.15	0.0630	0.34
Bayou Plaquemine Brule	PB	24	14.80 - 12.00	2.80	28	0.10	405 - 432	884.67	48.0	3.43	0.62089	0.0038	0.0124	0.00	0.45	3.43	0.0061	1.00
Bayou Plaquemine Brule	PB	25	12.00 - 6.00	6.00	6	1.00	433 - 438	919.25	63.0	4.50	0.62089	0.0022	0.0072	0.00	0.45	4.50	0.0035	1.00
Bayou Plaquemine Brule	PB	26	6.00 - 0.00	6.00	6	1.00	439 - 444	940.35	52.0	3.71	0.66731	0.0035	0.0113	0.00	0.45	3.71	0.0052	1.00

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Bayou Blanc Eqn.'s

$W = 0.0413(X) + 3.6838$

$D = 0.0077(Y) + 0.18$

Bayou Plaquemine Brule Eqn.'s

$W = 0.0645(X) - 9.9295$

$D = 0.005(X) - 0.805$

**D = cQ^d + e

***V = aQ^b

BAYOU PLAQUEMINE BRULE WATERSHED
Drainage Areas and Discharges

Location	RK	Drainage area (miles ²)	Drainage area (kilometers ²)	Discharge- without point sources (cms)	Church Point*	Atwood Acres	Point Source Calibration	Discharges in cms	Discharge-with point sources (cms)			
							North Rayne	Crowley High	Crowley POTW*	Rayne POTW*	Esther- wood	
Model Input (measured Q):												
Gumpoint Gully			8.02	0.00071								
Prather Gully			10.04	0.00212								
Coles Gully above Gumpoint and Prather			38.90	0.07018								
Coles Gully below Gumpoint and Prather			56.96	0.07301								
Long Point Gully			79.85	0.05207								
Bayou Plaquemine Brule above Church Point			115.47	0.03113								
Bayou Blanc above Rayne			1.83	0.01814								

Model Input (calculated Q):												
Junction of Bayou Plaquemine Brule and West Fork	82.96	12.79	33.13	0.01752								
Hazelwood Gully at mouth		13.47	34.89	0.01846								
Coles Gully at mouth		21.80	56.46	0.02987								
Long Point Gully at mouth		33.34	86.35	0.04568								
Headwaters of Atwood Gully			0.00	0.00000								
Headwaters of Atwood Bayou			1.65	0.00087								
Headwaters of Sills Gully			29.17	0.01543								
Headwaters of Sills Bayou			4.64	0.00245								
Bayou Wikoff above Sills Bayou			148.07	0.07833								
Crowley High Gully above Crowley High School			0.00	0.00000								
Headwaters of Bayou Blanc			1.83	0.00097								
Headwaters of North Coulee Trier			17.37	0.00919								
Bayou Jones at mouth		33.88	87.75	0.04642								

Model calibration (measured Q):												
Bayou Plaquemine Brule @ hwy 367	45.01		257.51	0.11610			0.00044	0.00346				0.12565
Bayou Wikoff	5.67		202.31	0.04845								0.15424
Bayou Blanc at top of lake	23.20		4.19	0.00045								0.09081
Bayou Blanc at bottom of lake	22.30		5.19	0.00243								0.09959
Bayou Blanc at hwy 720	17.12		19.55	0.02049								0.10270

Model calibration (calculated Q):												
Bayou Wikoff at mouth	0.00	84.74	219.48	0.11610			0.00044	0.00346				0.12000
Bayou Blanc at mouth	0.00	35.36	91.58	0.04845								0.10508
Crowley High Gully at mouth			0.85	0.00045								0.00150
Atwood Bayou at mouth			4.59	0.00243								0.00300
Sills Bayou at mouth			38.73	0.02049								0.02439
N. Coulee Trier at mouth			18.87	0.00998								0.01375
Bayou Plaquemine Brule at mouth of Hazelwood Gully	54.38	82.20	212.90	0.11262	0.03256							0.14518
Bayou Plaquemine Brule at mouth of Coles Gully	40.39			0.22444	0.03256							0.25700
Bayou Plaquemine Brule at mouth of Long Point Gully	32.36	163.81	424.27	0.34613	0.03256	0.000569	0.00044	0.00346	0.00105	0.082119	0.05663	0.38316
Bayou Plaquemine Brule at mouth of Bayou Wikoff	30.29	252.63	654.31	0.39834	0.03256	0.000569	0.00044	0.00346	0.00105	0.082119	0.05663	0.57517
Bayou Plaquemine Brule at mouth of Bayou Blanc			753.00	0.49745	0.03256	0.000569	0.00044	0.00346	0.00105	0.082119	0.05663	0.67804
Mouth of Bayou Plaquemine Brule	0.00	363.07	940.35	0.49745	0.03256	0.000569	0.00044	0.00346	0.00105	0.082119	0.05663	0.67804

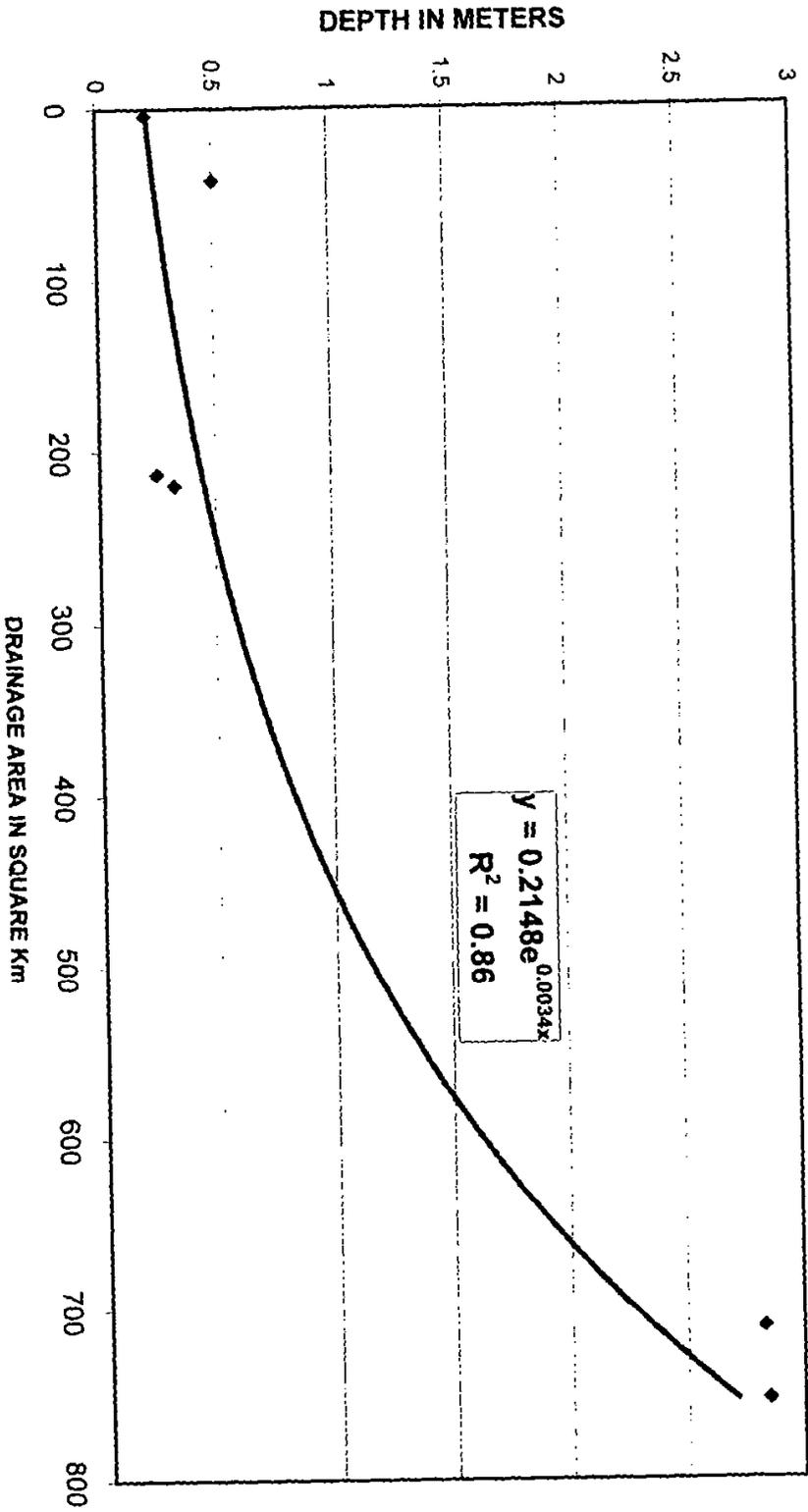
* Flows taken from WLA model calibration input

BAYOU PLAQUEMINE BRULE

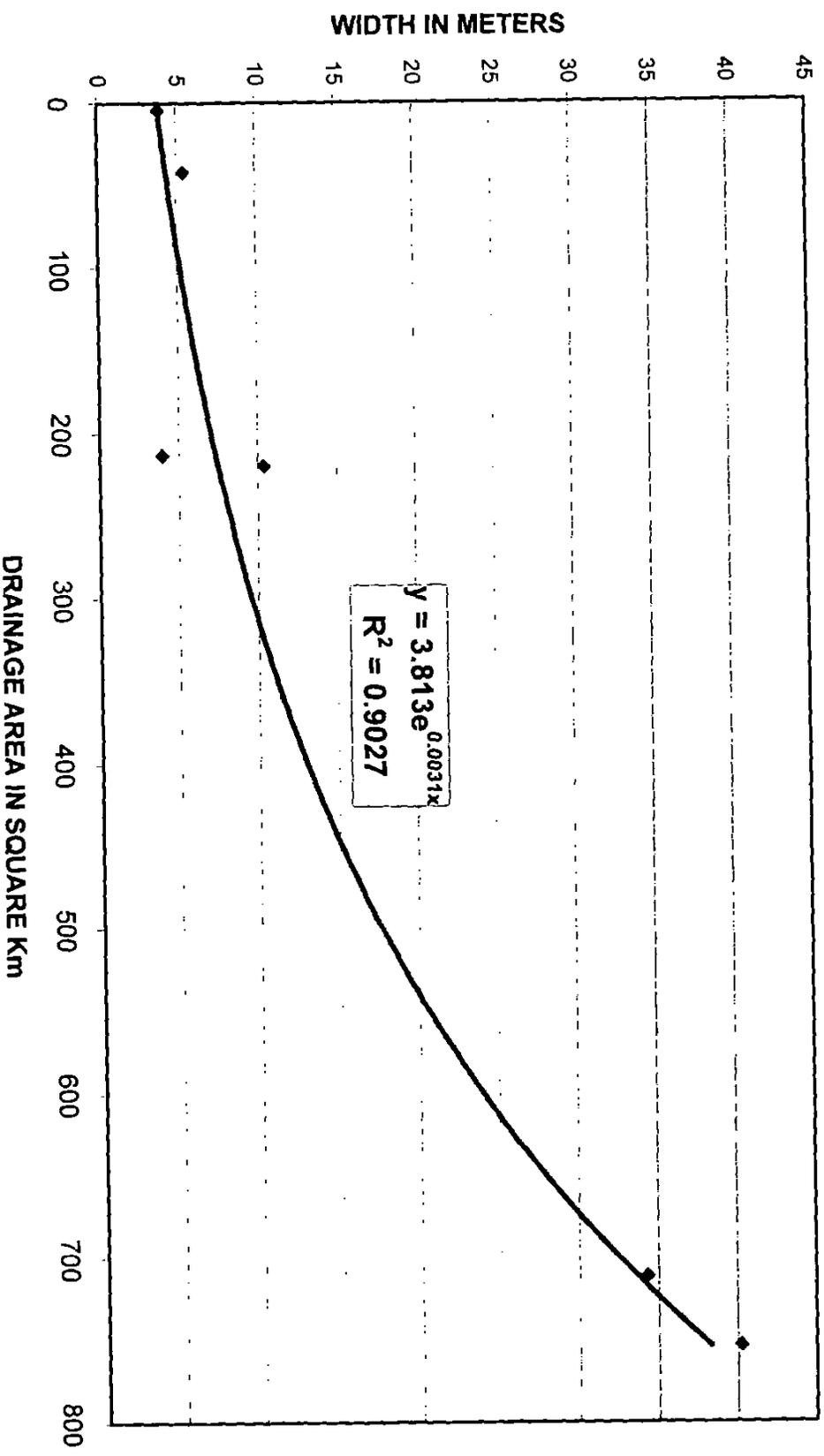
Width and Depth Versus Drainage Area

COMBINED SITES			B. PLAQUEMINE BRULE			B. BLANC		
DRAINAGE AREA	DEPTH	WIDTH	DRAINAGE AREA	DEPTH	WIDTH	DRAINAGE AREA	DEPTH	WIDTH
4.27	0.213	3.86	212.9	0.246	3.94	4.27	0.213	3.86
41.83	0.503	5.41	711.27	2.83	34.29	41.83	0.503	5.41
212.9	0.246	3.94	753.26	2.85	40.23			
219.48	0.32	10.4						
711.27	2.83	34.29						
753.26	2.85	40.23						

DEPTH vs. DRAINAGE AREA FOR SITES ON BAYOU PLAQUEMINE BRULE AND BAYOU
BLANC



WIDTH vs. DRAINAGE AREA FOR SITES ON BAYOU PLAQUEMINE BRULE AND BAYOU
BLANC



BAYOU PLAQUEMINE BRULE
Width and Depth Determinations

Reach no.	Water-body name	Drainage area (Km ²)	Width by field measurement (m)	Depth by field measurement (m)	At Rkm	Width from DRGs (m)	Width from spot images (m)	At Rkm	Selected width (m)	Selected depth (m)	Width to depth ratio	Calculated depth (m)	Basis for selection
1	BPP	115.47							5.5	0.32	15.8		Width and depth determined by W & D vs. DA eqs.
2	BPP	212.9	3.9	0.25	reach avg				7.4	0.44	15.8		Width and depth determined by W & D vs. DA eqs.
3	BPP	283.85	3.9	0.25	reach avg				7.4	0.44	15.8		Width and depth determined by W & D vs. DA eqs.
4	BPP	337.92	4.1	0.29	45.0	12.0	12.5	40.2	12.0	0.86	14.2		Width from DRG & Depth by w/d ratio
5	BPP	427.18				29.0			29.0	2.07			Width from DRG & Depth by w/d ratio
6	BPP	434.84				30.0	16.5		30.0	2.14			Width from DRG & Depth by w/d ratio
9	BPP	675.08				26.0	15.2		26.0	1.86			Width from DRG & Depth by w/d ratio
13	BPP	711.27	34.3	2.83	reach avg	35.0	19.7		34.3	2.83	12.1		Width from DRG & Depth by w/d ratio
15	BPP	753.26	40.2	2.85	reach avg	45.0	32.6		40.2	2.85	14.1		Width from DRG & Depth by w/d ratio
16	BPP	847.51				50.0	39.9		50.0	3.57			Width from DRG & Depth by w/d ratio
22	BPP	884.67				48.0	53.1		48.0	3.43			Width from DRG & Depth by w/d ratio
24	BPP	919.25				63.0	40.6		63.0	4.50			Width from DRG & Depth by w/d ratio
25	BPP	940.35				52.0	45.2		52.0	3.71			Width from DRG & Depth by w/d ratio
17	BB	4.27	3.9	0.21					3.9	0.21	18.1		Field data
18	BBL		46.7	0.30					39.2	0.30			Depth from field data & width to calibrate TOT
19	BBL		46.7	0.30					39.2	0.30			Depth from field data & width to calibrate TOT
20	BB		5.4	0.50					5.4	0.50	10.8		Field data
21	BB	91.58				20.0	16.2	0.0	20.0	1.43			Width from DRG & Depth by w/d ratio
12	BW	219.48	10.4	0.32	5.7	15.0		0.0	10.4	0.32	32.5	0.3	Field data
10	SG	29.17							4.2	0.24			Width and depth from A vs. W and A vs. D plots
11	SB	38.73							4.3	0.25			Width and depth from A vs. W and A vs. D plots
14	CHG	0.85							3.8	0.22			Width and depth from A vs. W and A vs. D plots
7	AG	0.00							3.8	0.21			Width and depth from A vs. W and A vs. D plots
8	AB	4.59							3.9	0.22			Width and depth from A vs. W and A vs. D plots
23	NCT	18.87							4.0	0.23			Width and depth from A vs. W and A vs. D plots

Notes:

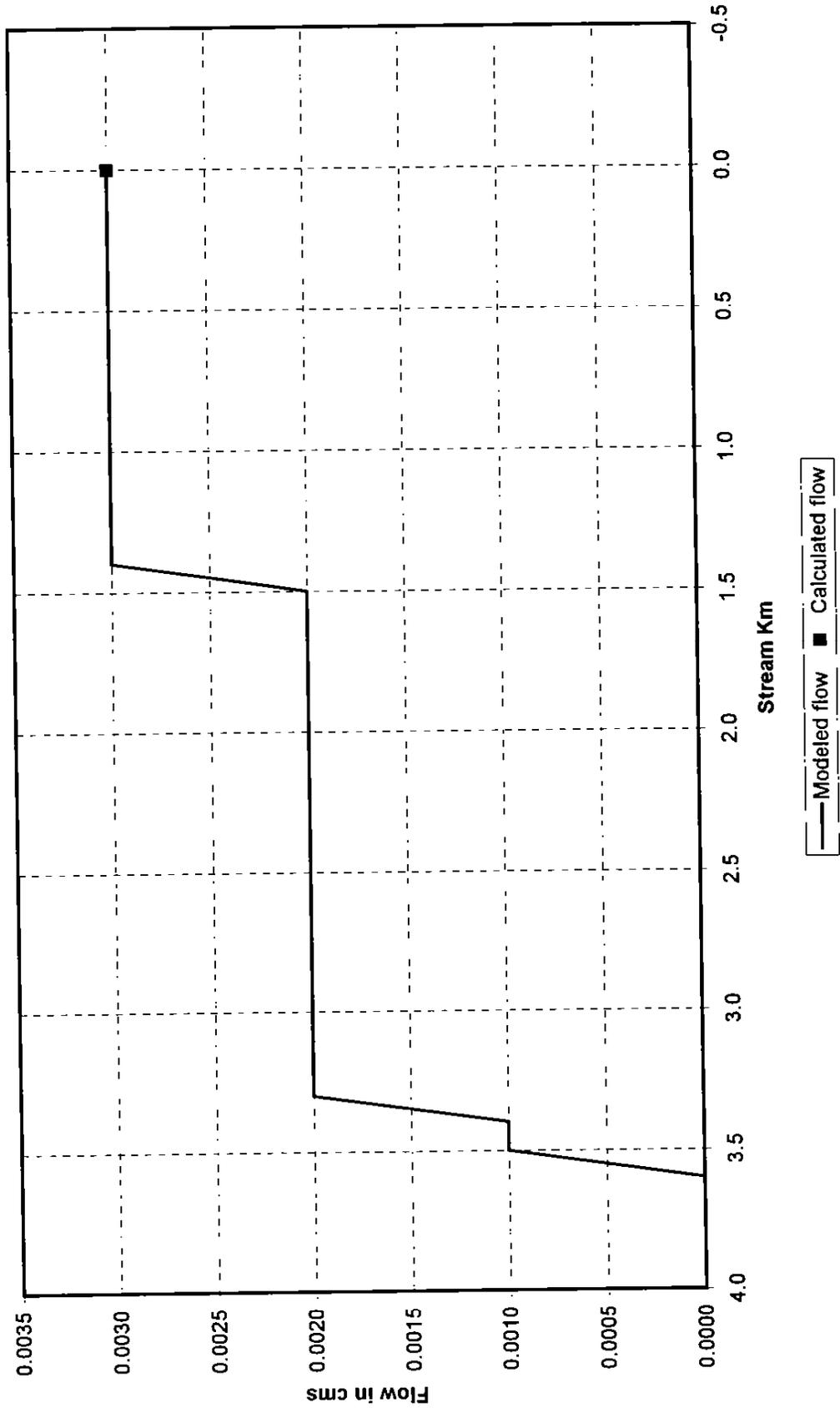
Reach 18 & 19 depth is average of Rayne model output from top to bottom of lake.
 Reach 18 & 19 width adjusted to give lake volume equal to Rayne model.
 Depth in Bayou Plaquemine Brule is width/14 except for reaches 2, 3, 15, and 16 where field data exists.
 Depth in reach 21 of Bayou Blanc is width/14.
 Drainage area of Atwood Gully (AG) was too small to be measured.
 Width and depth in Atwood Gully, Atwood Bayou, Sills Gully, Sills Bayou, Crowley High Gully, and North Coulee Trest were set in accordance with the relation derived from the width and depth versus drainage area plots.

BAYOU PLAQUEMINE BRULE
Flow Calibration

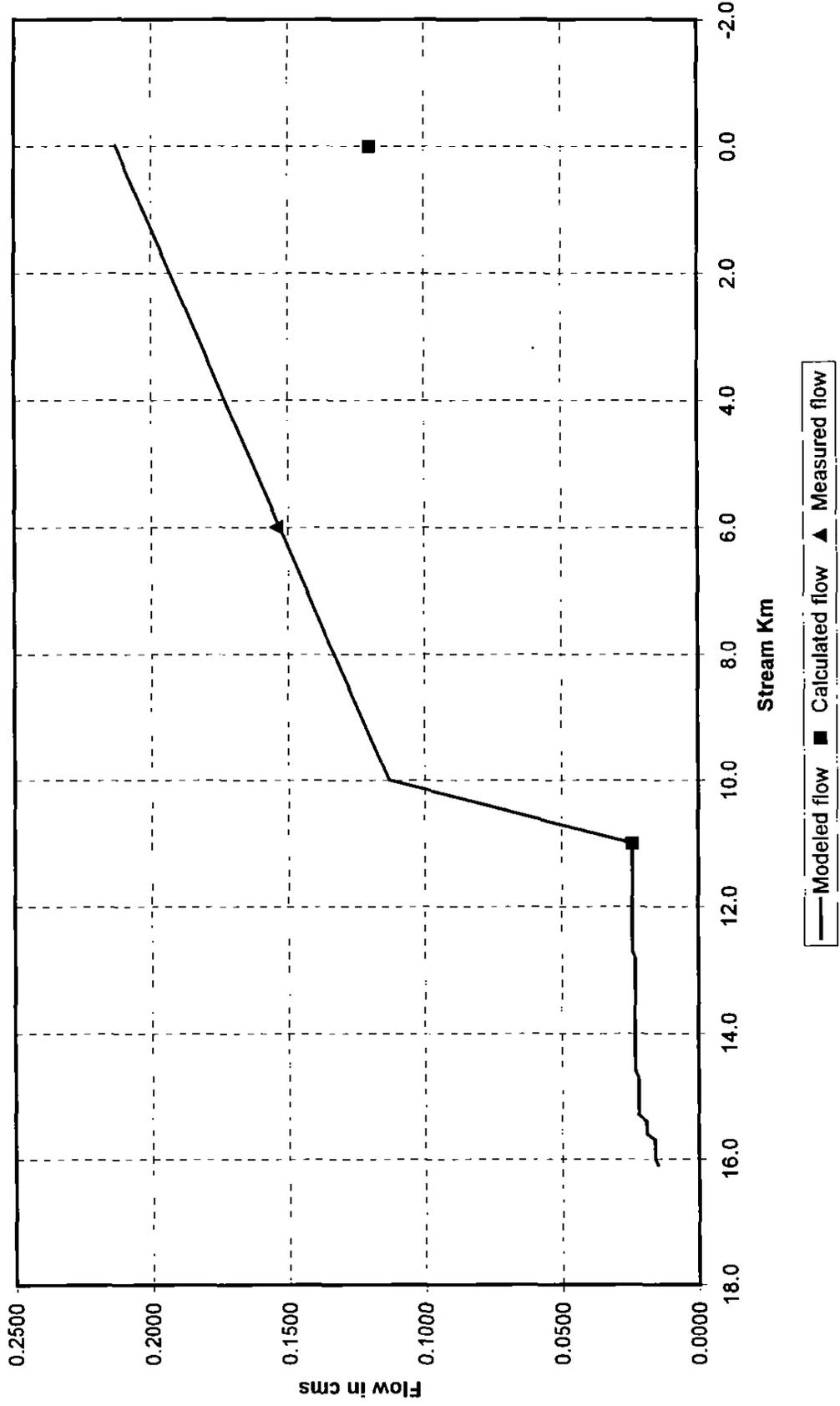
Reach No.	Stream	Upstream flow (cms)	Point sources (cms)	Tributaries (cms)	Reach length (Km)	Distributed flow (cms/km)	Downstream flow (cms)	Calibration Location	Model flow (cms)	Calibration flow (cms)	Characteristic flow (cms)	Incremental flow (cms)
0	BPB	0.01752	0.00000	0.00000	12.8	0.0011	0.0316					
1	BPB	0.03160	0.00256	0.00000	4.0	0.0011	0.06856	BPB @ RK 66.72	0.036	0.031	0.03600	0.0044
2	BPB	0.06856	0.00000	0.00000	0.2	0.0011	0.06878				0.06878	0.0002
3	BPB	0.06878	0.00000	0.01846	11.8	0.0011	0.10022	BPB @ RK 54.20	0.100	0.145	0.08176	0.0130
4	BPB	0.10022	0.00000	0.02987	14.0	0.0011	0.14949	BPB @ RK 45.0	0.110	0.128	0.11562	0.0154
5	BPB	0.14549	0.00000	0.04568	8.0	0.0011	0.19897	BPB @ RK 32.20	0.200	0.257	0.15429	0.0088
6	BPB	0.19897	0.00000	0.00324	1.0	0.0000	0.20321				0.19897	0.0000
7	AG	0.00000	0.00057	0.00000	0.2	0.0005	0.00067				0.00067	0.0001
8	AB	0.00087	0.00000	0.00067	3.4	0.0005	0.00324	AB @ mouth	0.0032	0.0030	0.00324	0.0017
9	BPB	0.20321	0.00000	0.21266	1.0	0.0000	0.41587	BPB @ RK 30.20	0.416	0.383	0.20321	0.0000
10	SG	0.01543	0.00044	0.00000	0.4	0.0005	0.01607				0.01607	0.0002
11	SB	0.00245	0.00346	0.01607	4.7	0.0005	0.02433	SB @ mouth	0.024	0.024	0.02433	0.0024
12	BW	0.07833	0.00000	0.02433	11.0	0.0100	0.21266	BW @ RK 5.67	0.156	0.154	0.21266	0.1100
13	BPB	0.07833	0.00000	0.02433	11.0	0.0100	0.21266	BW @ mouth	0.213	0.120	0.21266	0.1100
14	CHG	0.00000	0.00105	0.00000	1.9	0.0003	0.00162	CHG @ mouth	0.0016	0.0015	0.00162	0.0006
15	BPB	0.41749	0.08212	0.00000	4.6	0.0000	0.49961				0.49961	0.0000
16	BPB	0.49961	0.00000	0.10792	7.0	0.0000	0.60753	BPB @ RK 15.2	0.608	0.575	0.49961	0.0000
17	BB	0.01814	0.05663	0.00000	2.5	0.0070	0.09227	BB @ top of lake	0.092	0.091	0.09227	0.0175
18	BB	0.09227	0.00000	0.00000	0.4	0.0090	0.09587				0.09587	0.0036
19	BB	0.09227	0.00000	0.00000	0.5	0.0090	0.09677	BB @ bottom of lake	0.097	0.100	0.09677	0.0045
20	BB	0.09677	0.00000	0.00000	6.8	0.0005	0.10017	BB @ Hwy 720 (RK 17.12)	0.099	0.103	0.10017	0.0034
21	BB	0.10017	0.00000	0.00000	15.5	0.0005	0.10792	BB @ mouth	0.108	0.105	0.10792	0.0078
22	BPB	0.60753	0.00000	0.01336	0.4	0.0000	0.62089				0.60753	0.0000
23	NCT	0.00919	0.00377	0.00000	1.0	0.0004	0.01336	NCT @ mouth	0.013	0.014	0.01336	0.0004
24	BPB	0.62089	0.00000	0.00000	2.8	0.0000	0.62089				0.62089	0.0000
25	BPB	0.62089	0.00000	0.04642	6.0	0.0000	0.66731				0.62089	0.0000
26	BPB	0.66731	0.00000	0.00000	6.0	0.0000	0.66731	BPB @ Bdc	0.667	0.678	0.66731	0.0000

* The characteristic flow is the flow one element above the bottom of the reach.
Note: Bold italic print denotes measured calibration data as opposed to calculated calibration data.

ATWOOD GULLY \ ATWOOD BAYOU
Flow Calibration

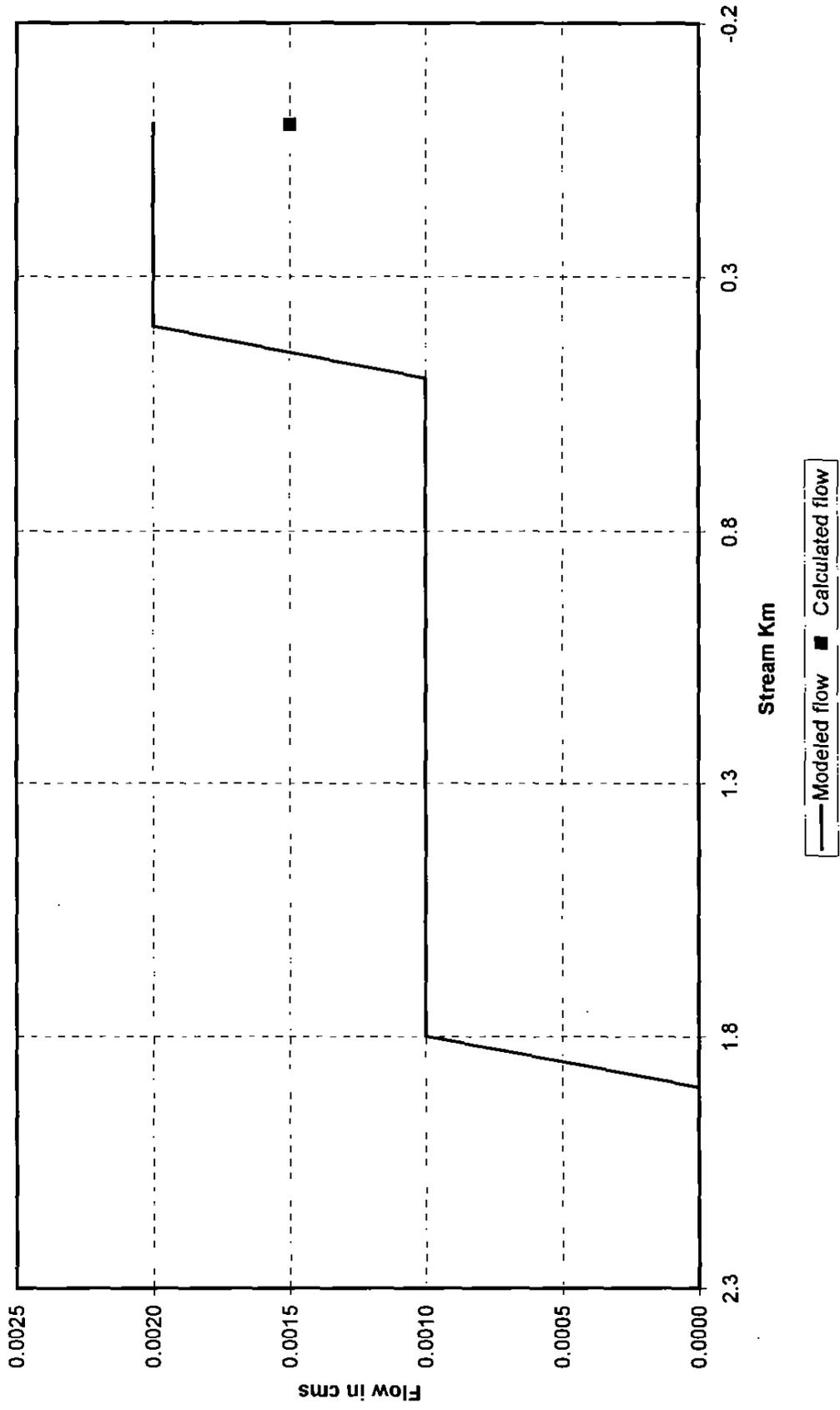


SILLS GULLY / SILLS BAYOU / BAYOU WIKOFF
Flow calibration

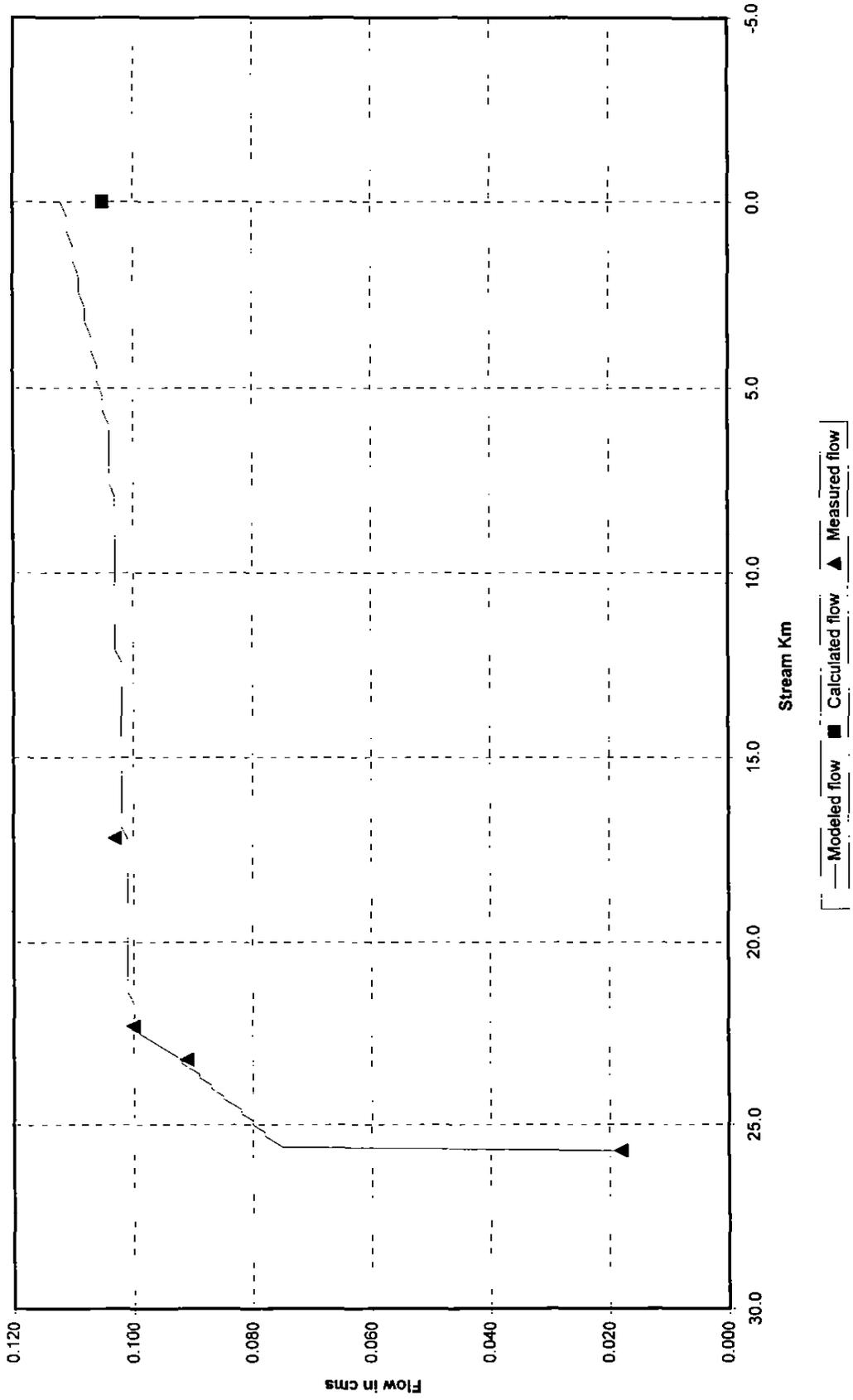


CROWLEY HIGH GULLY

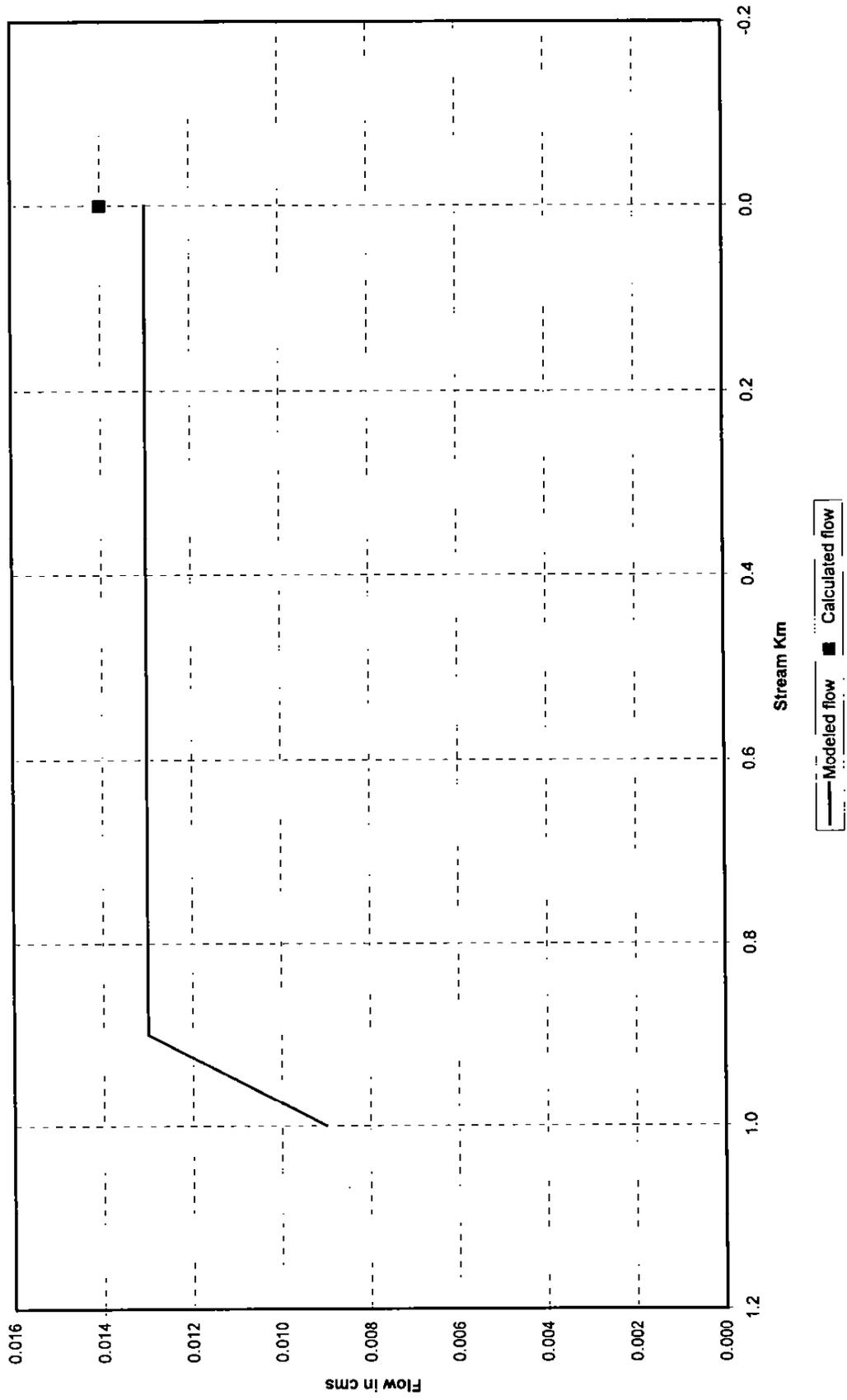
Flow calibration



BAYOU BLANC
Flow Calibration



NORTH COULEE TRIEF Flow Calibration



APPENDIX C – WATER QUALITY CALIBRATION

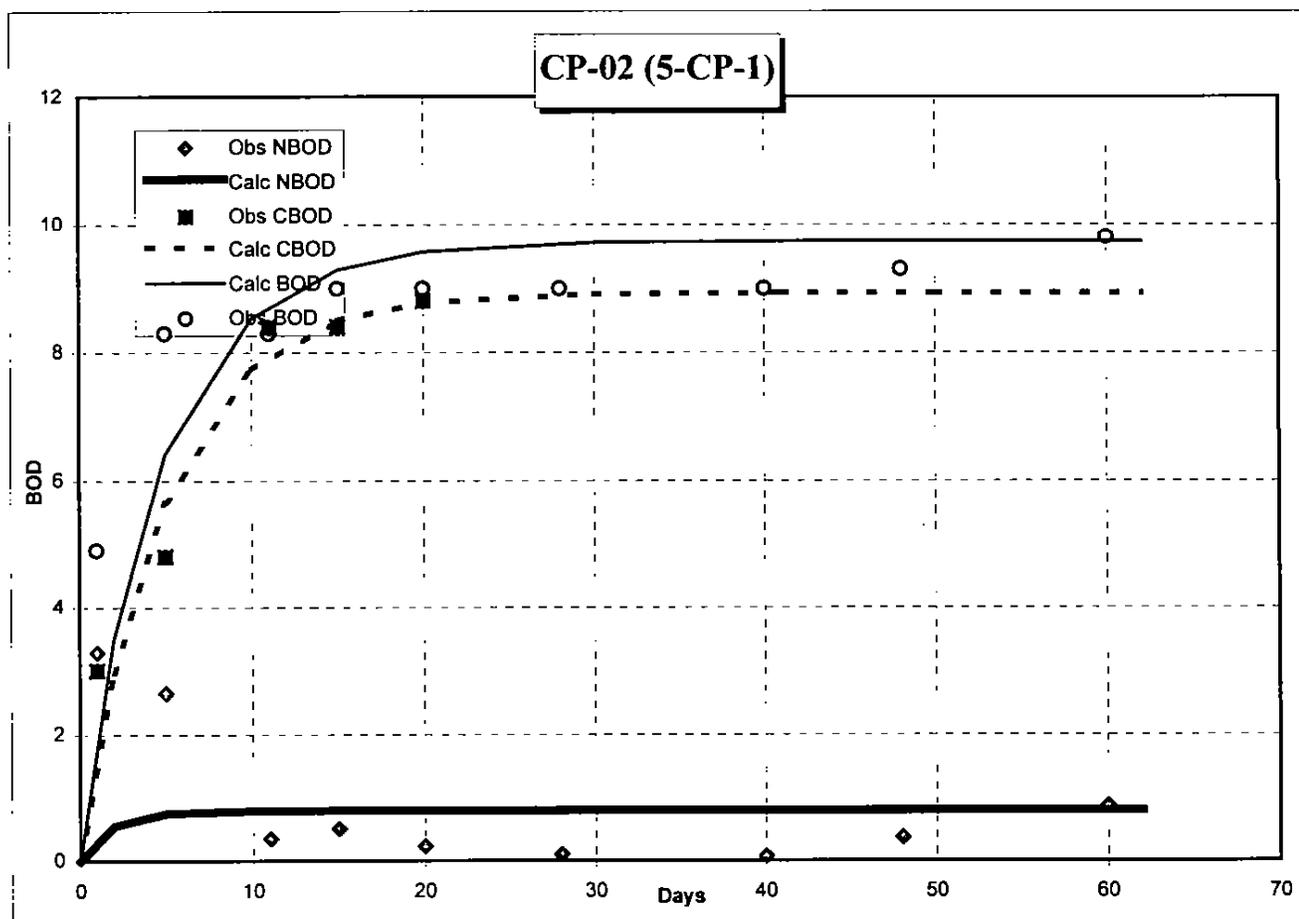
BODPlots.doc - BOD Analysis for Church Point: 5-CP-1
BODPlots.doc - BOD Analysis for Church Point: 5-CP-2
BODPlots.doc - BOD Analysis for Church Point: 5-CP-7
BODPlots.doc - BOD Analysis for Church Point: 5-CP-8
BODPlots.doc - BOD Analysis for Church Point: 5-CP-13
BODPlots.doc - BOD Analysis for Church Point: 5-CP-14
BODPlots.doc - BOD Analysis for Church Point: 5-CP-19
BODPlots.doc - BOD Analysis for Church Point: 5-CP-20
BODPlots.doc - BOD Analysis for Church Point: 5-CP-25
BODPlots.doc - BOD Analysis for Church Point: 5-CP-26
BODPlots.doc - BOD Analysis for Church Point: 5-CP-31
BODPlots.doc - BOD Analysis for Church Point: 5-CP-32
BODPlots.doc - BOD Analysis for Church Point: 5-CP-31*
BODPlots.doc - BOD Analysis for Church Point: 5-CP-32*
CP_BODs.doc - Church Point nonsuppressed BODs
BODPlots.doc - BOD Analysis for Bayou Plaquemine Brule near Egan: AA02613 T-650
BODPlots.doc - BOD Analysis for Bayou Plaquemine Brule near Egan: AA03085 T-650
WQ_Data2.xls - Rates and Concentrations from Prior Models and DMRs
WQ_In3.xls - Model Water Quality Input
CalData.xls - Bayou Plaquemine Brule Calibration Data
Model Output:
Calbtxt.doc - Word file from which the Qual-Txn text output file was printed
CalData.doc - Data as Input to Calibration Plots
Calbplt.doc - Word file from which 9 plots were printed
BPB @ Church Pt Rch 1-3
Bayou Blanc Rchs 17-21
BPB Rchs 1-26
Calaplt.doc - Word file from which 12 plots were printed
Atwood Rchs 7-8
Sills/Wikoff Rchs 10-12
Crowley High Rch 14
N. Coulee Trief Rch 23

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-02 (5-CP-1)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	4.9	3.27	3.00
5	8.3	2.64	4.80
11	8.3	0.35	8.40
15	9	0.51	8.40
20	9	0.23	8.80
28	9	0.10	
40	9	0.07	
48	9.3	0.37	
60	9.8	0.87	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
1.98	0.36	1.63
6.42	0.75	5.66
8.75	0.79	7.95
9.29	0.80	8.49
9.57	0.80	8.77
9.70	0.80	8.90
9.73	0.80	8.93
9.73	0.80	8.93
9.73	0.80	8.93
UBOD	0.80	8.93
K	0.60	0.20
Lag	0.00	0.00
RMSE/UBOD (note 2)	467.96%	18.87%



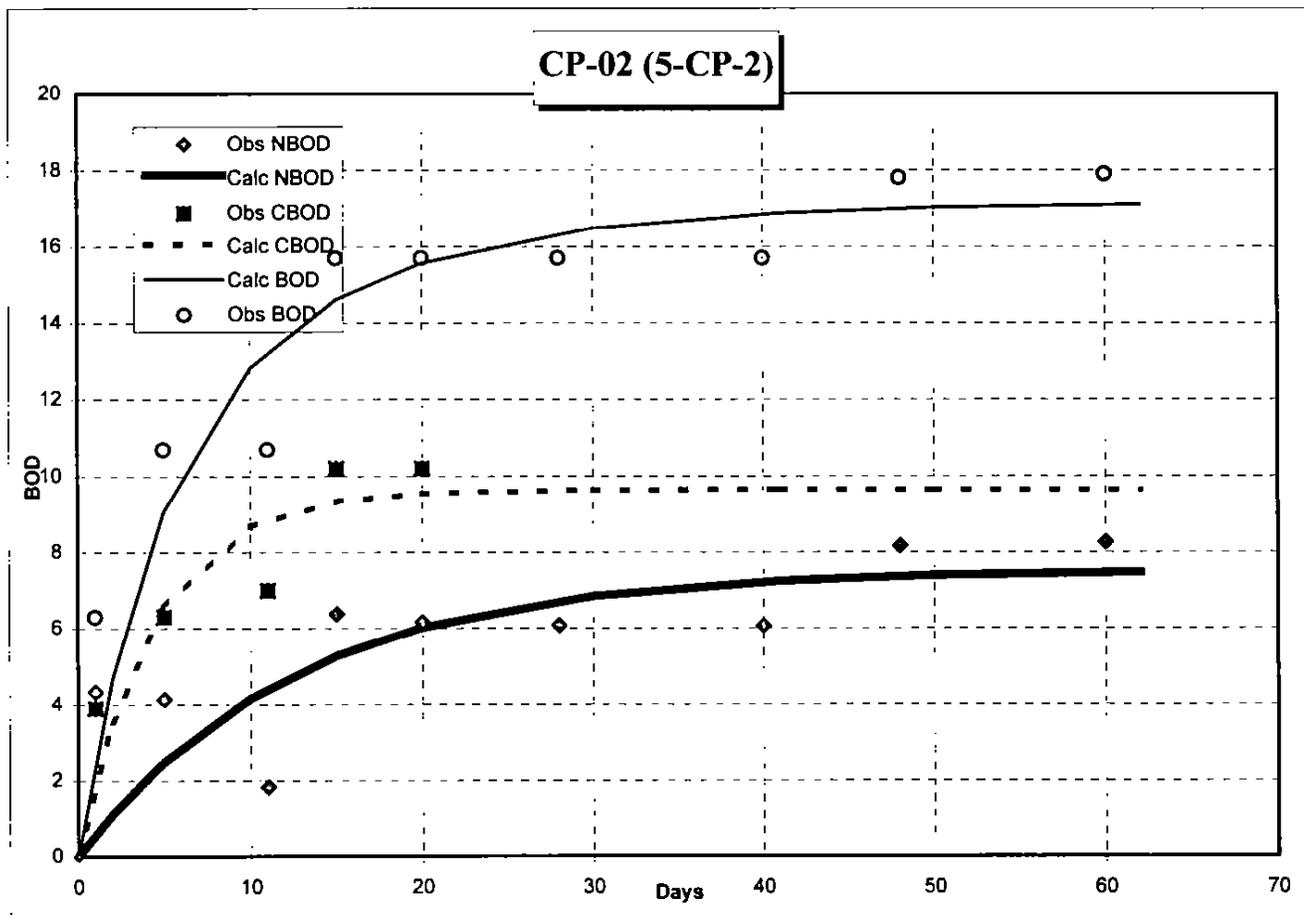
Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.
 Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

**BOD Analysis of the for:
CHURCH POINT**

Sample/Site # = CP-02 (5-CP-2)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	6.3	4.33	3.90
5	10.7	4.13	6.30
11	10.7	1.84	7.00
15	15.7	6.37	10.20
20	15.7	6.15	10.20
28	15.7	6.07	
40	15.7	6.06	
48	17.8	8.16	
60	17.9	8.25	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
2.55	0.58	1.97
9.06	2.49	6.57
13.29	4.42	8.86
14.61	5.28	9.33
15.57	6.02	9.55
16.36	6.73	9.63
16.86	7.22	9.64
17.01	7.36	9.64
17.10	7.46	9.65
UBOD	7.52	9.65
K	0.08	0.23
Lag	0.00	0.00
RMSE/UBOD (note 2)	69.97%	30.14%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

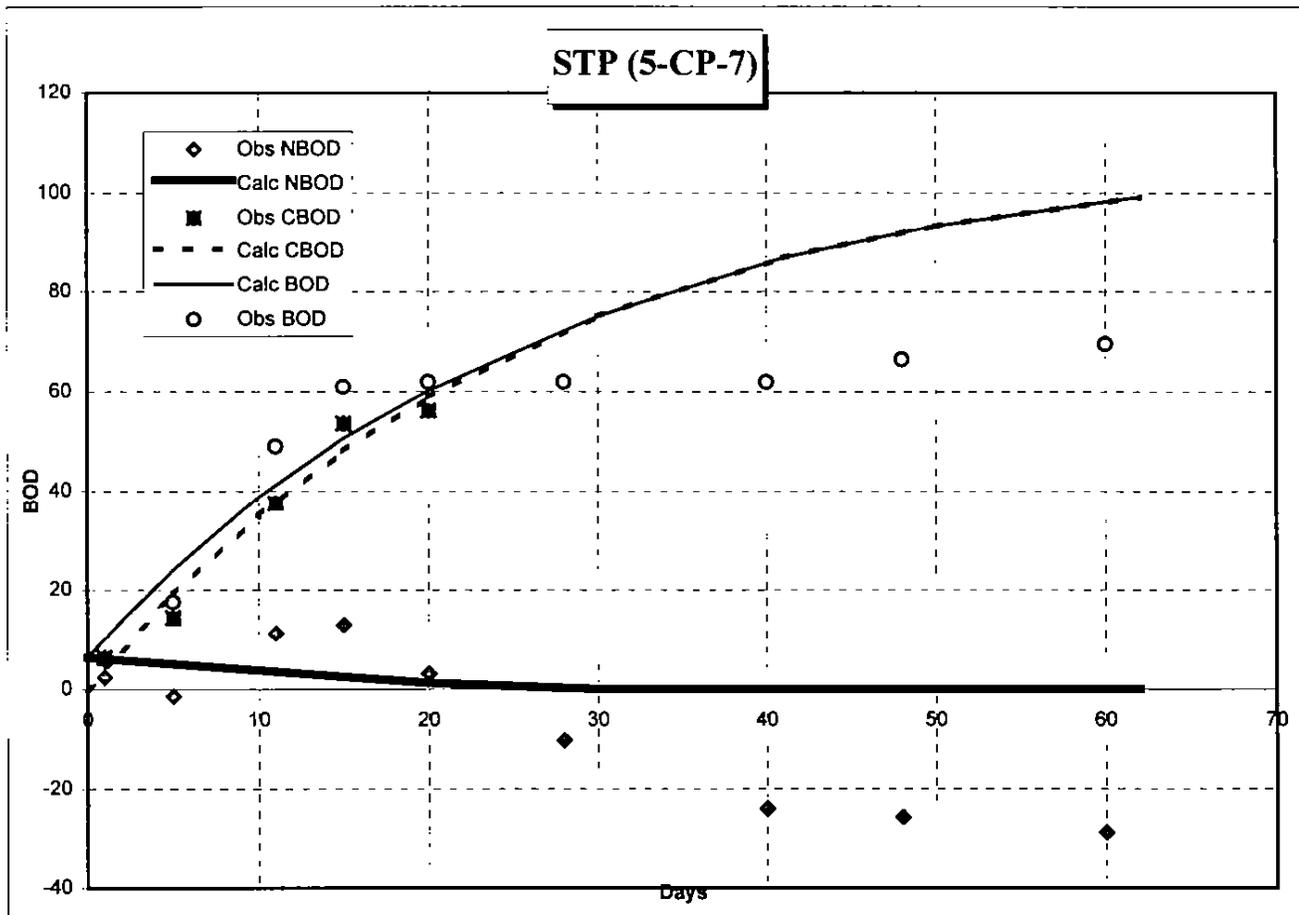
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

**BOD Analysis of the for:
CHURCH POINT**

Sample/Site # = STP (5-CP-7)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	6.1	2.32	6.30
5	17.6	-1.41	14.30
11	49	11.18	37.50
15	61	12.89	53.50
20	62	3.09	56.10
28	62	-10.33	
40	62	-24.00	
48	66.5	-25.63	
60	69.6	-28.78	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
9.86	6.08	3.78
24.04	5.02	19.01
41.30	3.48	37.82
50.58	2.47	48.11
60.15	1.24	58.91
72.33	0.00	72.33
86.00	0.00	86.00
92.13	0.00	92.13
98.38	0.00	98.38
UBOD	-47.35	108.78
K	0.00	0.04
Lag	25.17	0.10
RMSE/UBOD (note 2)	-103.34%	7.44%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

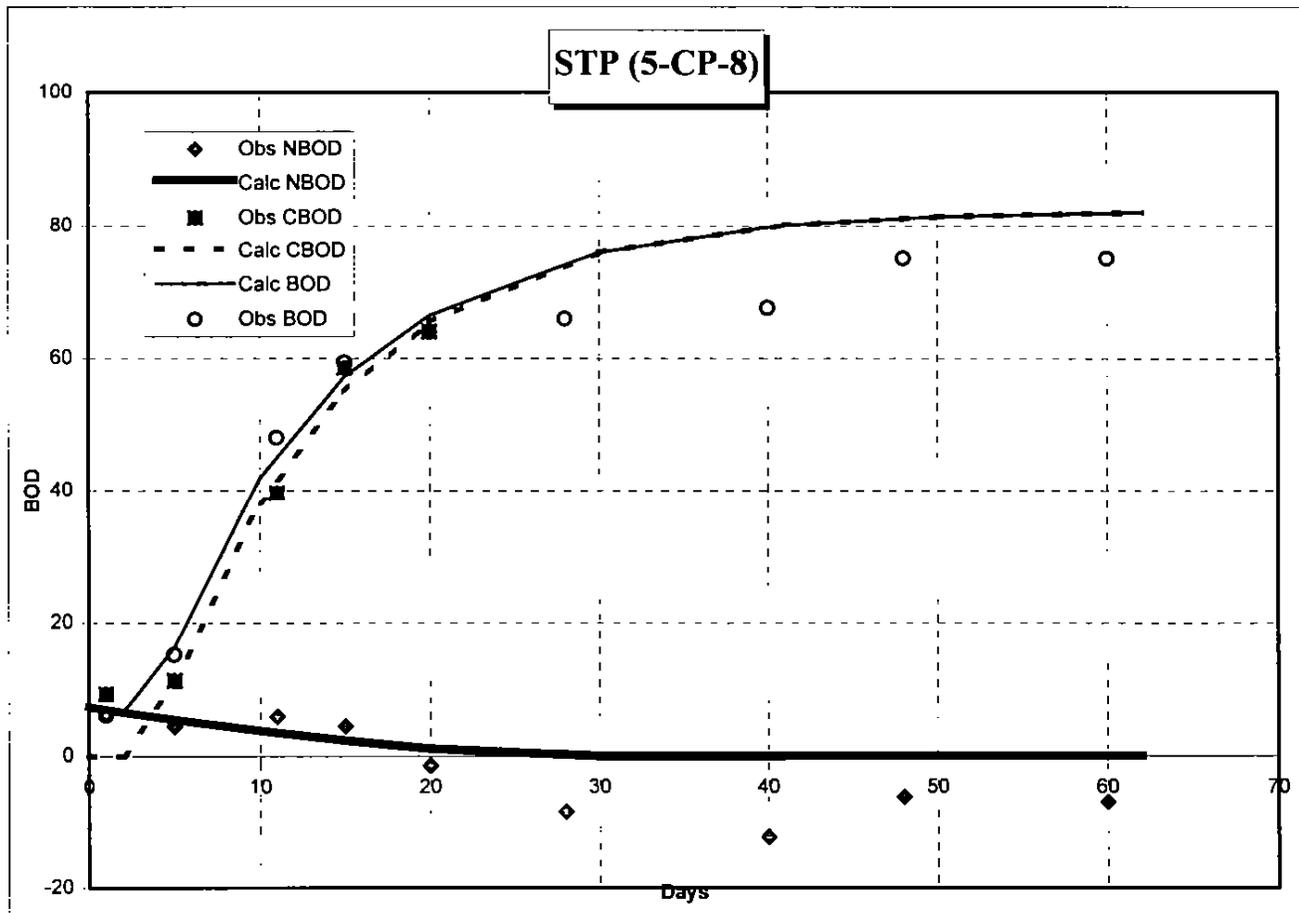
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

**BOD Analysis of the for:
CHURCH POINT**

Sample/Site # = STP (5-CP-8)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	6	6.00	9.30
5	15.2	4.31	11.30
11	48	5.82	39.60
15	59.4	4.40	58.60
20	64	-1.43	64.00
28	66	-8.52	
40	67.6	-12.29	
48	75	-6.23	
60	75	-7.02	

Calculated: $BOD_t = UBOD[1 - e^{-K(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
6.88	6.88	0.00
16.25	5.37	10.89
45.58	3.40	42.18
57.27	2.27	55.00
66.46	1.03	65.43
74.52	0.00	74.52
79.89	0.00	79.89
81.23	0.00	81.23
82.02	0.00	82.02
UBOD	-6.92	82.38
K	0.03	0.10
Lag	24.76	3.52
RMSE/UBOD (note 2)	-262.56%	12.64%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

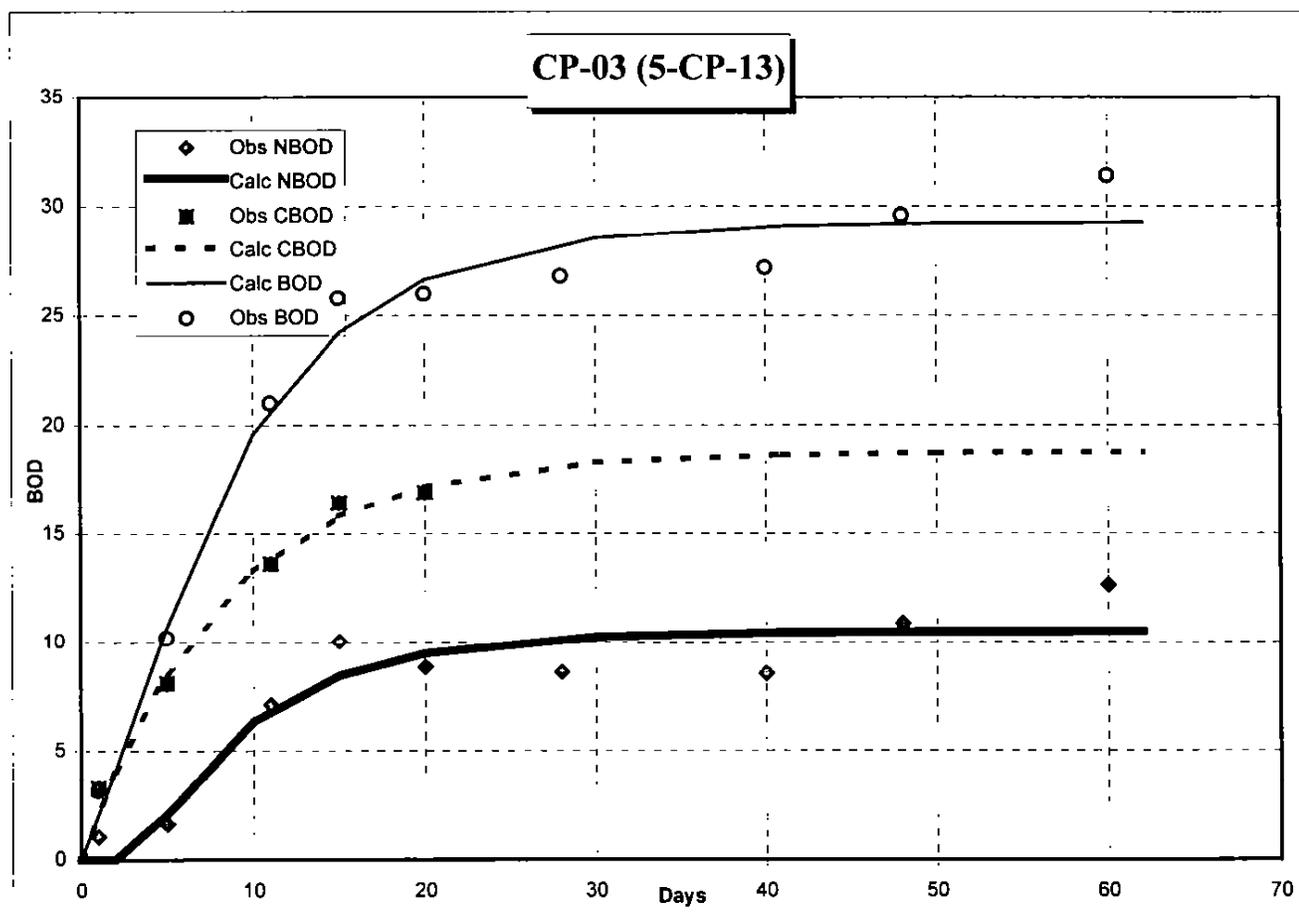
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-03 (5-CP-13)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	3.2	1.04	3.30
5	10.2	1.62	8.10
11	21	7.12	13.60
15	25.8	10.02	16.40
20	26	8.84	16.90
28	26.8	8.62	
40	27.2	8.54	
48	29.6	10.85	
60	31.4	12.61	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
2.16	0.00	2.16
10.64	2.06	8.58
20.77	6.89	13.88
24.22	8.44	15.78
26.64	9.48	17.16
28.34	10.16	18.18
29.08	10.42	18.66
29.21	10.46	18.75
29.26	10.47	18.79
UBOD	10.48	18.80
K	0.14	0.12
Lag	3.46	0.00
RMSE/UBOD (note 2)	36.76%	7.65%



Note 1 - Measured NBOD is calculated by subtracting the calc. CBOD from the Measured Total BOD.

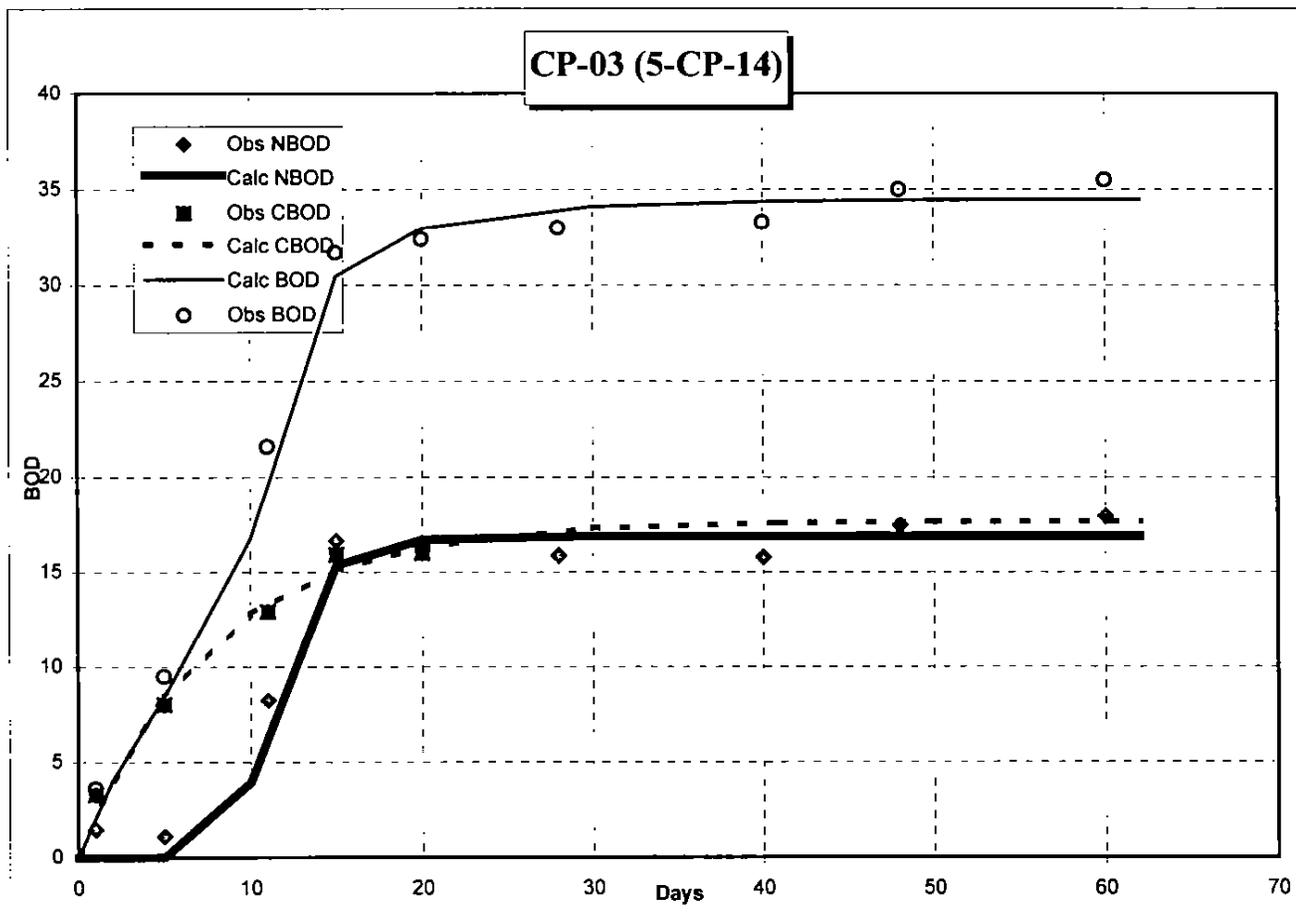
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-03 (5-CP-14)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	3.6	1.46	3.30
5	9.5	1.11	8.00
11	21.6	8.23	12.90
15	31.7	16.61	15.90
20	32.4	16.10	16.00
28	33	15.84	
40	33.3	15.77	
48	35	17.41	
60	35.5	17.88	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
2.14	0.00	2.14
8.39	0.00	8.39
21.82	8.44	13.37
30.44	15.34	15.09
32.97	16.67	16.30
34.00	16.84	17.16
34.37	16.85	17.53
34.44	16.85	17.59
34.47	16.85	17.62
UBOD	16.85	17.63
K	0.43	0.13
Lag	9.39	0.00
RMSE/UBOD (note 2)	17.68%	8.92%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

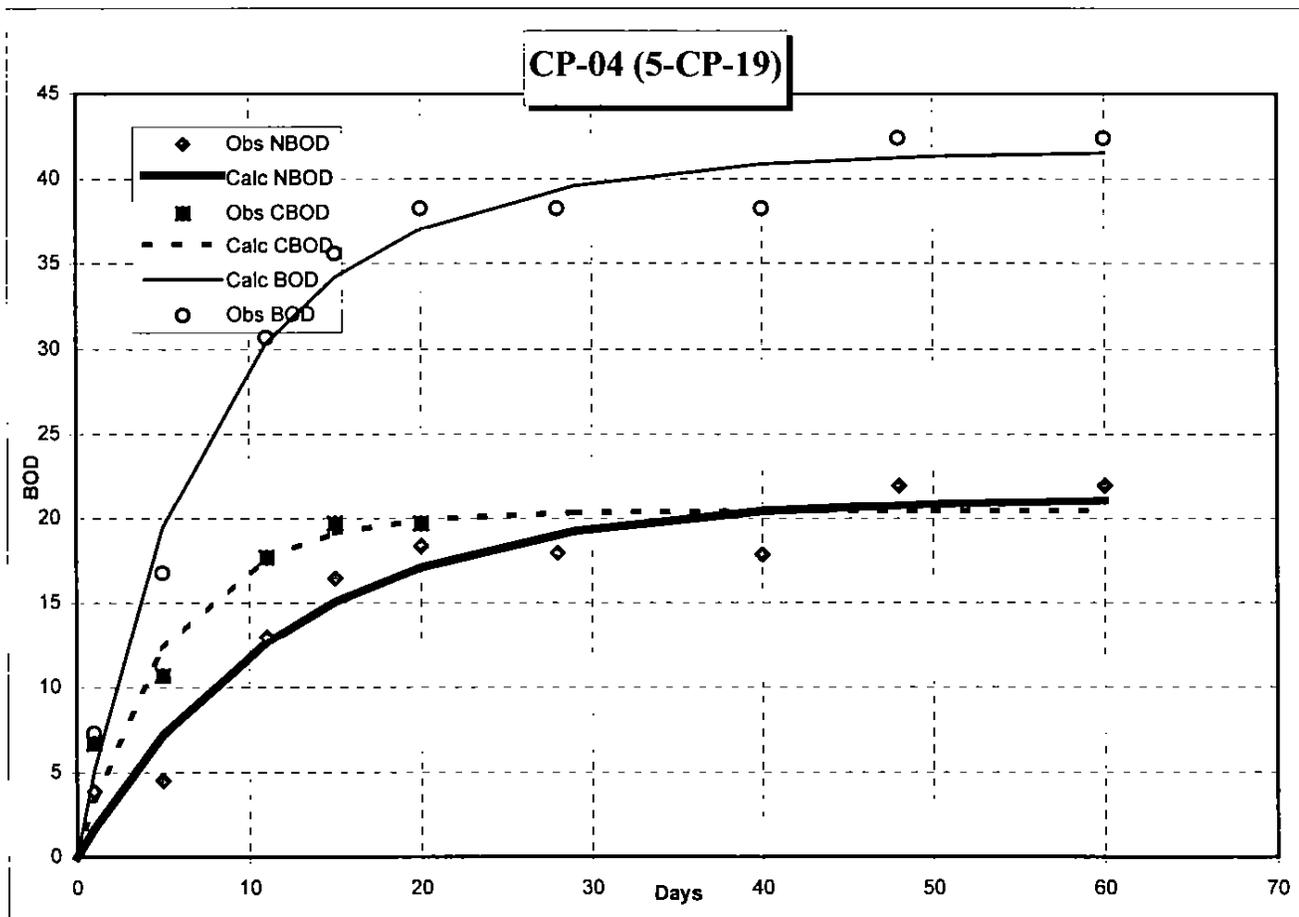
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-04 (5-CP-19)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	7.3	3.88	6.70
5	16.8	4.53	10.70
11	30.7	12.97	17.70
15	35.6	16.46	19.70
20	38.3	18.37	19.70
28	38.3	17.97	
40	38.3	17.86	
48	42.4	21.95	
60	42.4	21.95	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
5.10	1.68	3.42
19.44	7.17	12.27
30.37	12.65	17.73
34.19	15.05	19.14
37.06	17.13	19.93
39.43	19.10	20.33
40.86	20.42	20.44
41.24	20.80	20.45
41.50	21.05	20.45
UBOD	21.20	20.45
K	0.08	0.18
Lag	0.00	0.00
RMSE/UBOD (note 2)	23.75%	18.00%



Note 1 - Measured NBOD is calculated by subtracting the calc. CBOD from the Measured Total BOD.

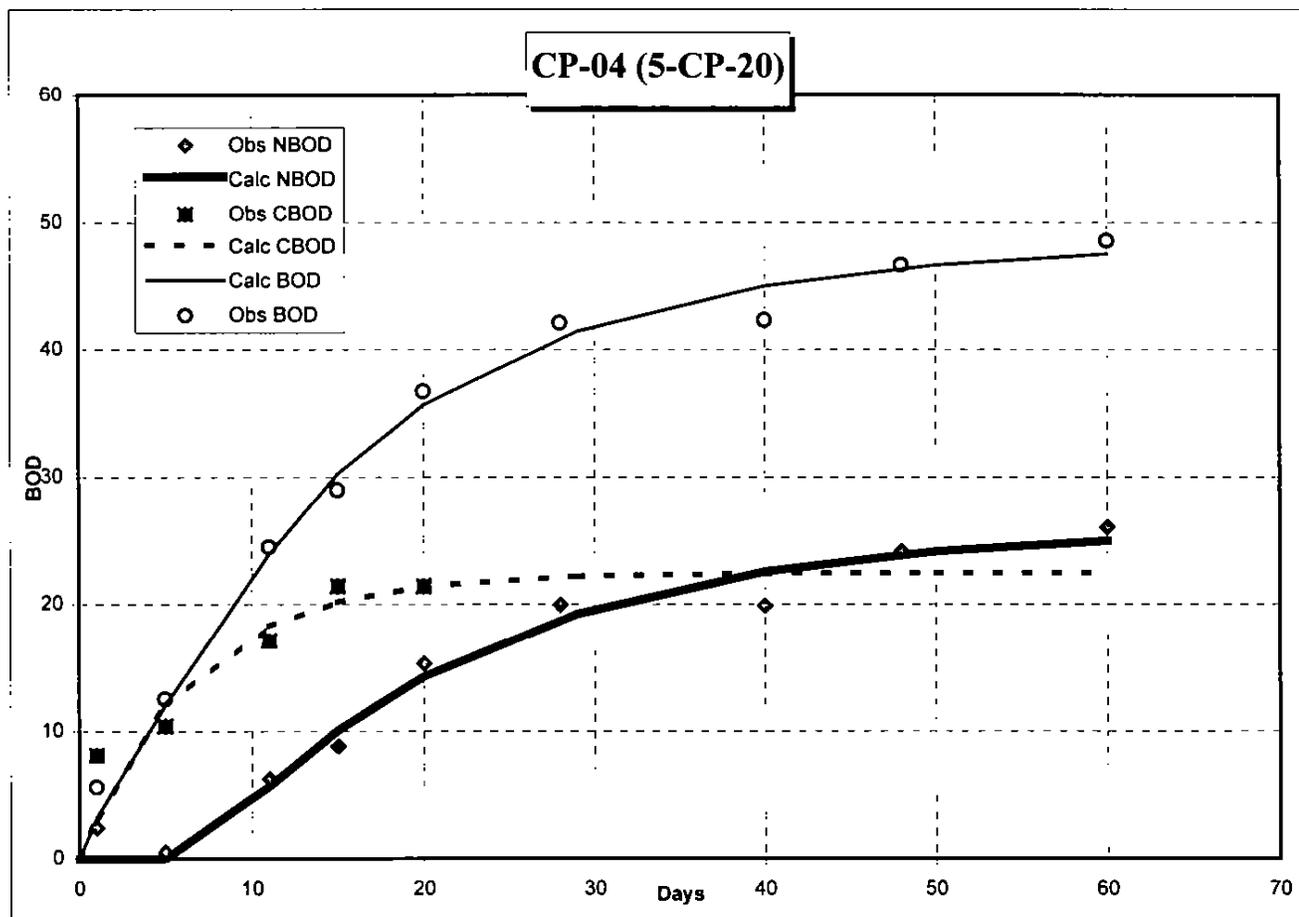
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-04 (5-CP-20)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
1	5.6	2.42	8.10
5	12.5	0.52	10.40
11	24.5	6.24	17.10
15	29	8.82	21.40
20	36.7	15.30	21.40
28	42.1	19.95	
40	42.3	19.89	
48	46.6	24.15	
60	48.5	26.04	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
3.18	0.00	3.18
11.98	0.00	11.98
23.91	5.64	18.26
30.24	10.06	20.18
35.66	14.26	21.40
40.95	18.80	22.15
44.96	22.55	22.41
46.33	23.88	22.45
47.45	24.98	22.46
UBOD	26.00	22.47
K	0.06	0.15
Lag	7.00	0.00
RMSE/UBOD (note 2)	16.63%	24.21%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

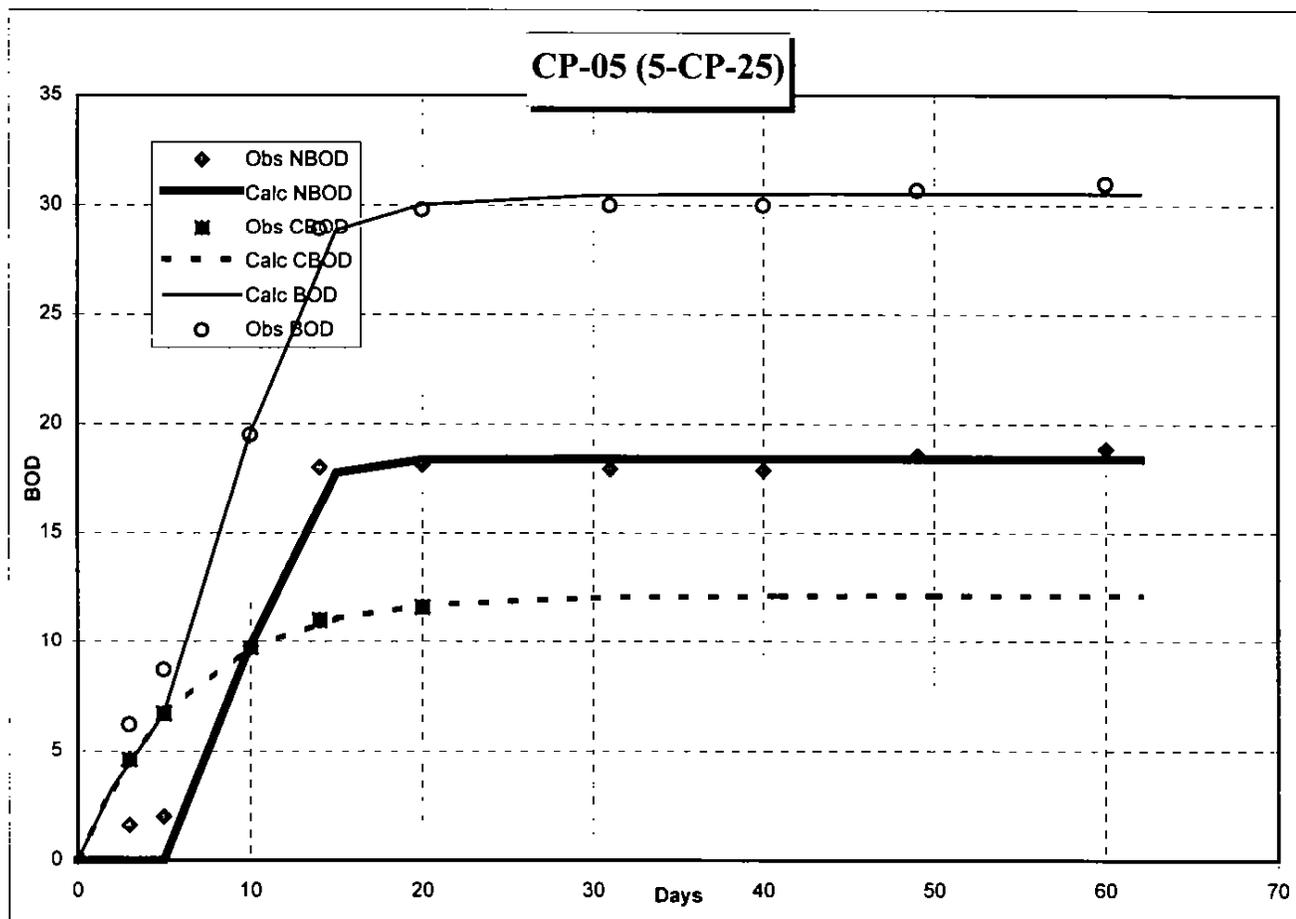
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

**BOD Analysis of the for:
CHURCH POINT**

Sample/Site # = CP-05 (5-CP-25)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
3	6.2	1.60	4.60
5	8.7	2.00	6.70
10	19.5	9.76	9.70
14	28.9	18.01	11.00
20	29.8	18.13	11.60
31	30	17.93	
40	30	17.87	
49	30.7	18.56	
60	31	18.86	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
4.60	0.00	4.60
6.70	0.00	6.70
19.58	9.85	9.74
28.23	17.34	10.89
30.03	18.35	11.67
30.46	18.40	12.07
30.52	18.40	12.13
30.54	18.40	12.14
30.54	18.40	12.14
UBOD	18.40	12.14
K	0.52	0.16
Lag	8.54	0.08
RMSE/UBOD (note 2)	15.16%	1.13%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

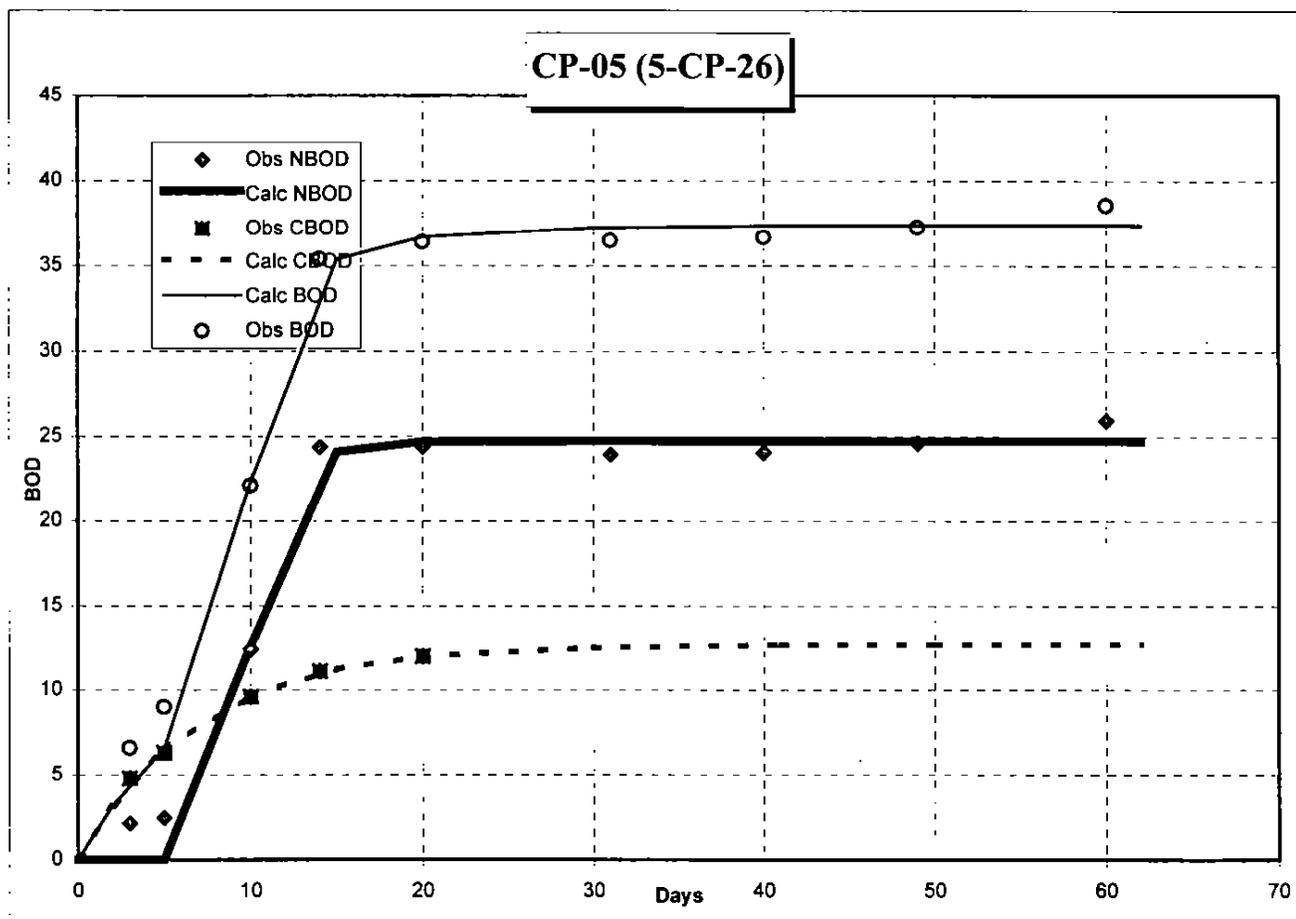
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-05 (5-CP-26)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
3	6.6	2.13	4.80
5	9	2.47	6.30
10	22.1	12.40	9.60
14	35.4	24.39	11.10
20	36.4	24.41	12.00
31	36.5	23.95	
40	36.7	24.05	
49	37.3	24.62	
60	38.6	25.91	

Calculated: $BOD_t = UBOD[1 - e^{-(k(t-lag))^n}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
4.47	0.00	4.47
6.53	0.00	6.53
22.32	12.62	9.70
34.63	23.62	11.01
36.69	24.70	11.99
37.28	24.74	12.55
37.39	24.74	12.65
37.42	24.74	12.68
37.42	24.74	12.69
UBOD	24.74	12.69
K	0.60	0.14
Lag	8.80	0.00
RMSE/UBOD (note 2)	15.05%	3.37%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

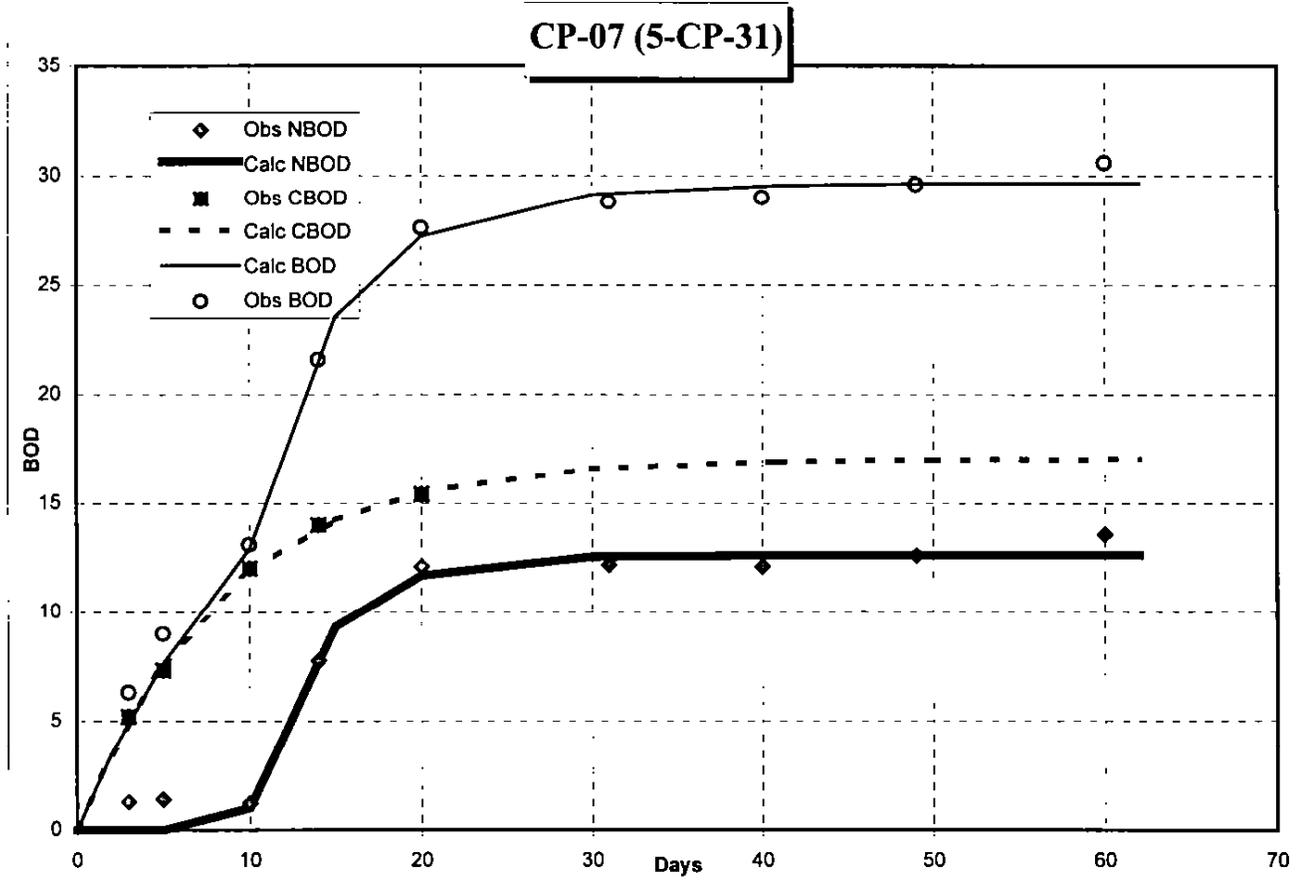
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-07 (5-CP-31)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
3	6.3	1.27	5.20
5	9	1.39	7.30
10	13.1	1.21	12.00
14	21.6	7.73	14.00
20	27.6	12.09	15.40
31	28.8	12.15	
40	29	12.08	
49	29.6	12.59	
60	30.6	13.55	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
5.03	0.00	5.03
7.61	0.00	7.61
12.89	1.00	11.89
22.25	8.38	13.87
27.19	11.68	15.51
29.20	12.55	16.65
29.52	12.60	16.92
29.62	12.61	17.01
29.65	12.61	17.05
UBOD	12.61	17.06
K	0.25	0.12
Lag	9.67	0.11
RMSE/UBOD (note 2)	18.65%	2.39%



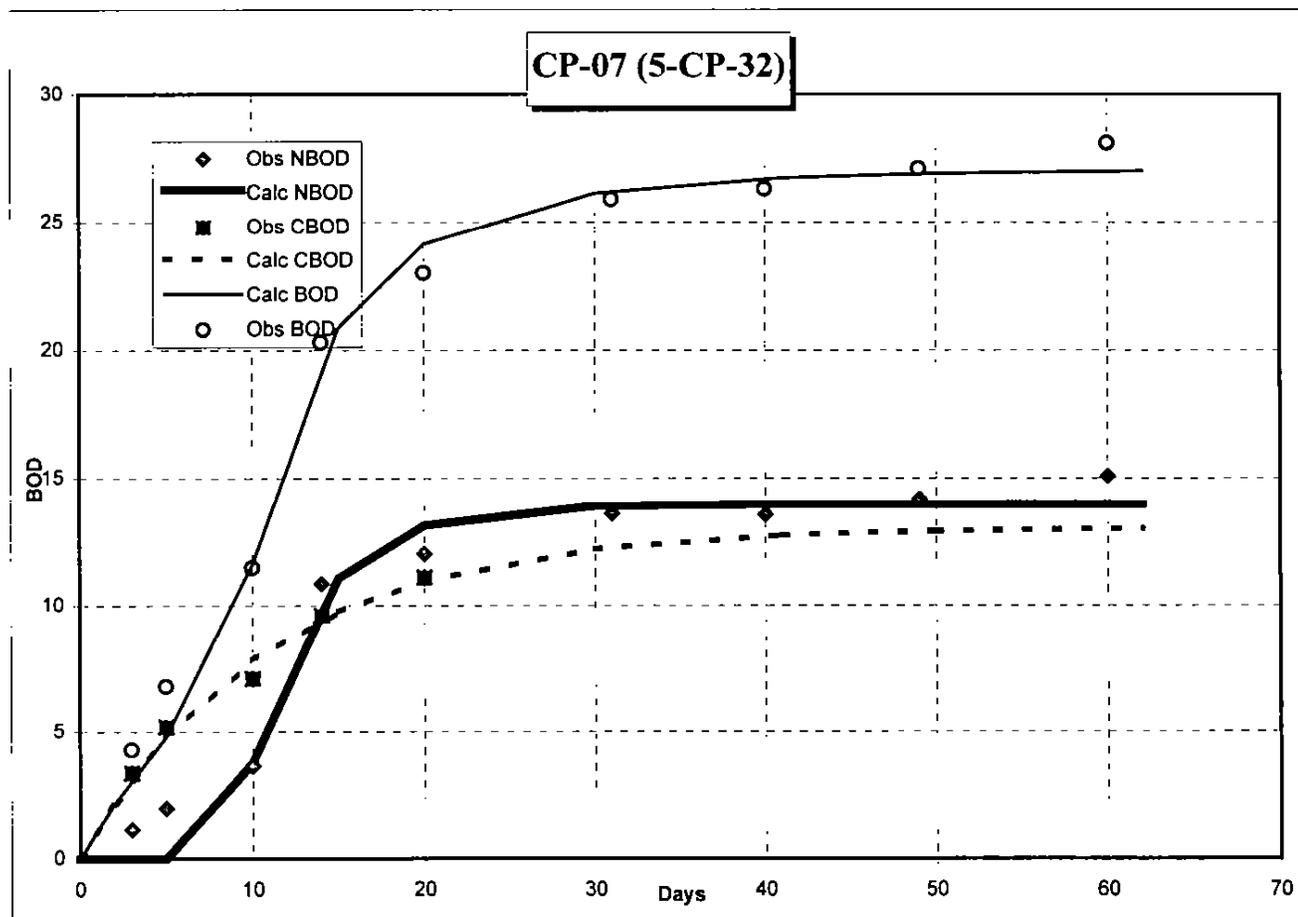
Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.
 Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-07 (5-CP-32)

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
3	4.3	1.16	3.40
5	6.8	2.00	5.20
10	11.5	3.67	7.10
14	20.3	10.86	9.60
20	23	12.03	11.10
31	25.9	13.60	
40	26.3	13.57	
49	27.1	14.18	
60	28.1	15.09	

Calculated: $BOD_t = UBOD[1 - e^{-K(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
3.14	0.00	3.14
4.80	0.00	4.80
11.63	3.80	7.83
19.70	10.26	9.44
24.12	13.15	10.97
26.21	13.91	12.30
26.69	13.96	12.73
26.88	13.96	12.92
26.97	13.96	13.01
UBOD	13.96	13.07
K	0.25	0.09
Lag	8.74	0.00
RMSE/UBOD (note 2)	20.95%	6.90%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

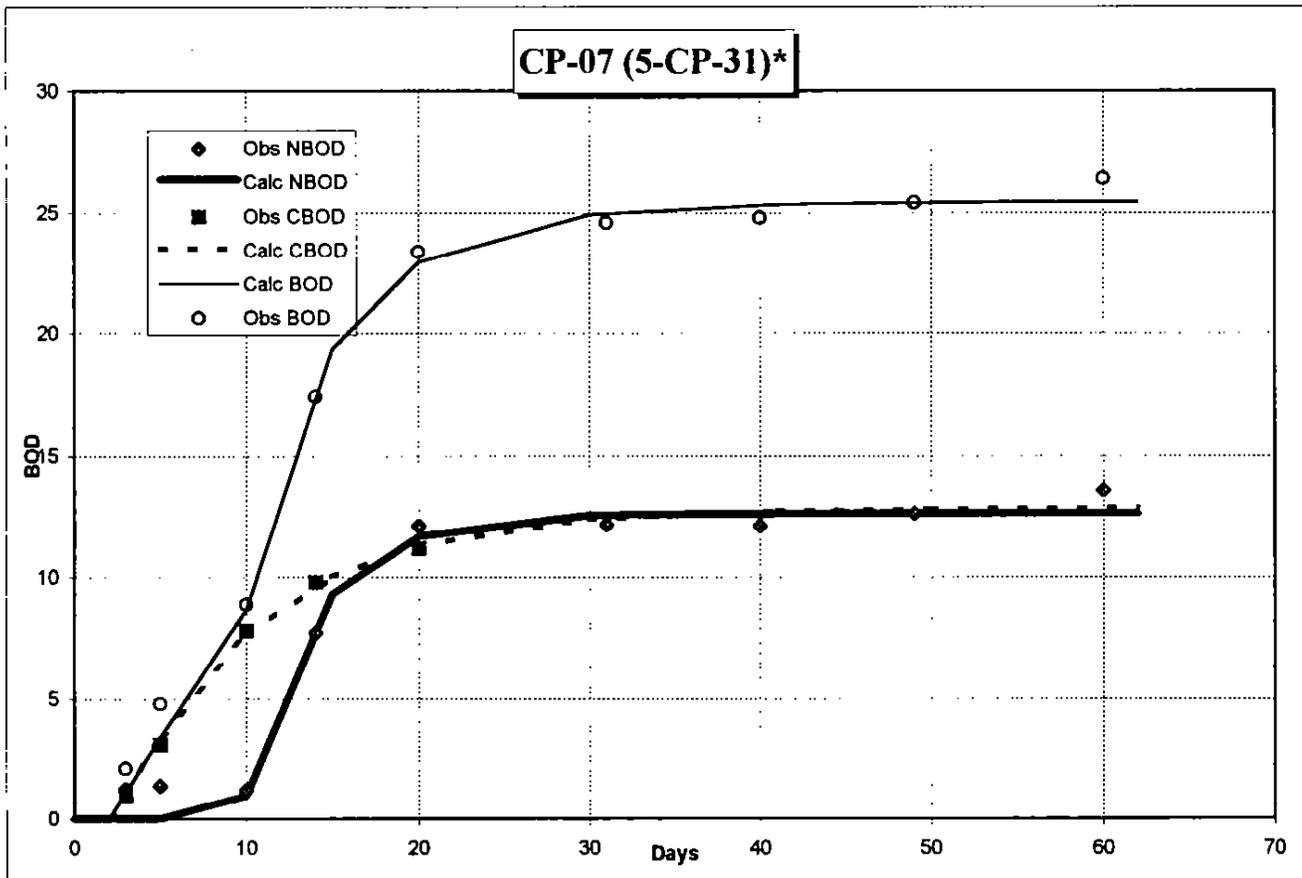
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
CHURCH POINT

Sample/Site # = CP-07 (5-CP-31)*

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
3	2.09	1.27	0.99
5	4.79	1.39	3.09
10	8.89	1.21	7.79
14	17.39	7.73	9.79
20	23.39	12.09	11.19
31	24.59	12.16	
40	24.79	12.09	
49	25.39	12.60	
60	26.39	13.57	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
0.82	0.00	0.82
3.40	0.00	3.40
8.68	1.00	7.68
18.04	8.38	9.66
22.97	11.68	11.30
24.98	12.55	12.43
25.30	12.60	12.70
25.40	12.60	12.79
25.43	12.60	12.82
UBOD	12.60	12.84
K	0.25	0.12
Lag	9.67	2.45
RMSE/UBOD (note 2)	18.63%	3.18%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

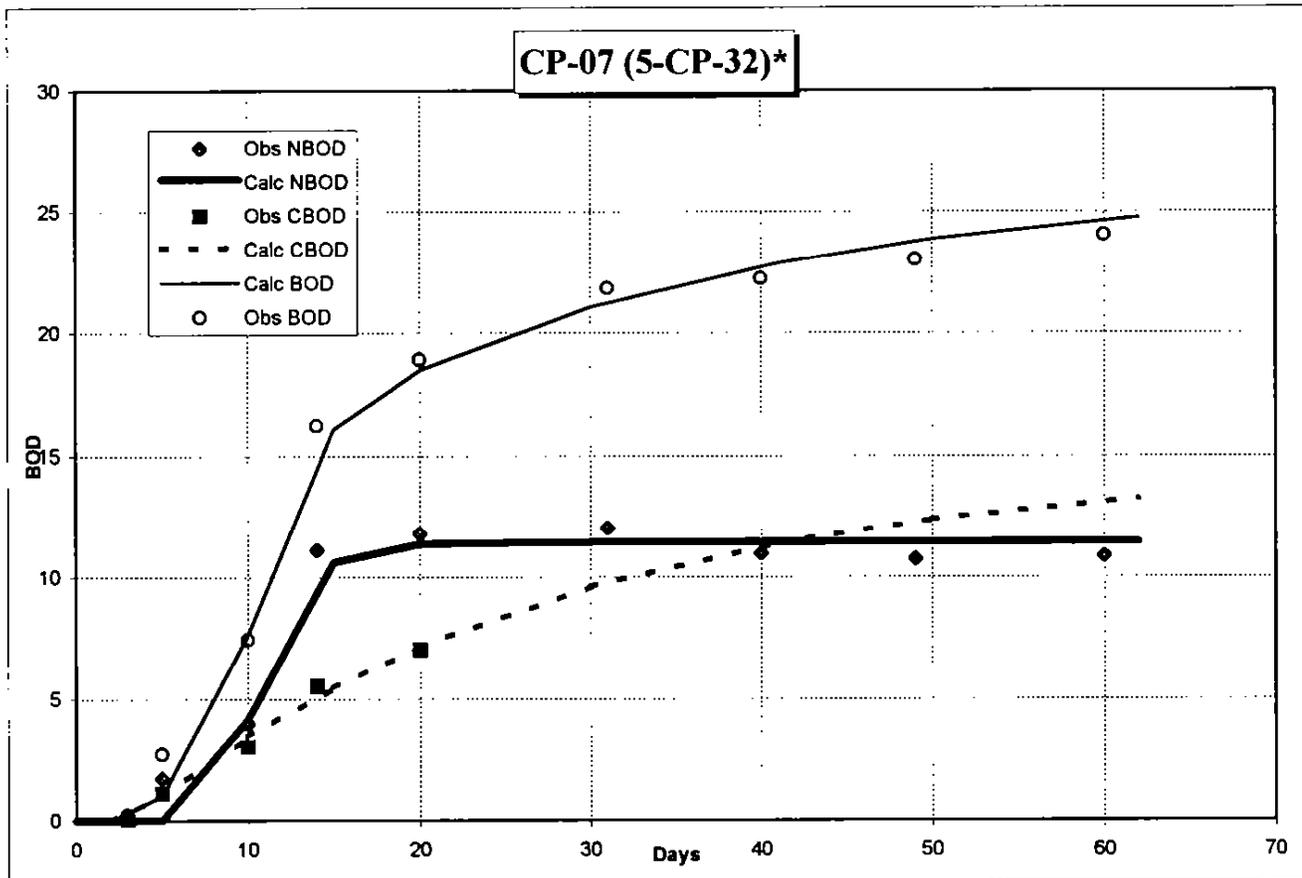
BOD Analysis of the for:

CHURCH POINT

Sample/Site # = CP-07 (5-CP-32)*

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
3	0.22	0.22	0.00
5	2.72	1.72	1.12
10	7.42	3.97	3.02
14	16.22	11.12	5.52
20	18.92	11.80	7.02
31	21.82	12.03	
40	22.22	10.96	
49	23.02	10.72	
60	24.02	10.87	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
0.00	0.00	0.00
1.00	0.00	1.00
7.60	4.15	3.45
15.25	10.15	5.10
18.48	11.36	7.12
21.25	11.45	9.79
22.72	11.45	11.26
23.75	11.45	12.30
24.60	11.45	13.15
UBOD	11.45	14.72
K	0.43	0.04
Lag	8.96	3.21
RMSE/UBOD (note 2)	20.71%	4.25%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

Church Point nonsuppressed HODs

	9	1	5	11	15	20	28	40	48	60
5-CP-7	6.10	17.60	49.00	61.00	62.00	62.00	62.00	62.00	66.50	69.60
5-CP-8	6.00	15.20	48.00	59.40	64.00	66.00	66.00	67.60	75.00	75.00
5-CP-1	4.90	8.30	8.30	9.00	9.00	9.00	9.00	9.00	9.30	9.30
5-CP-2	6.30	10.70	10.70	15.70	15.70	15.70	15.70	15.70	17.80	17.90

Church Point nonsuppressed BODs

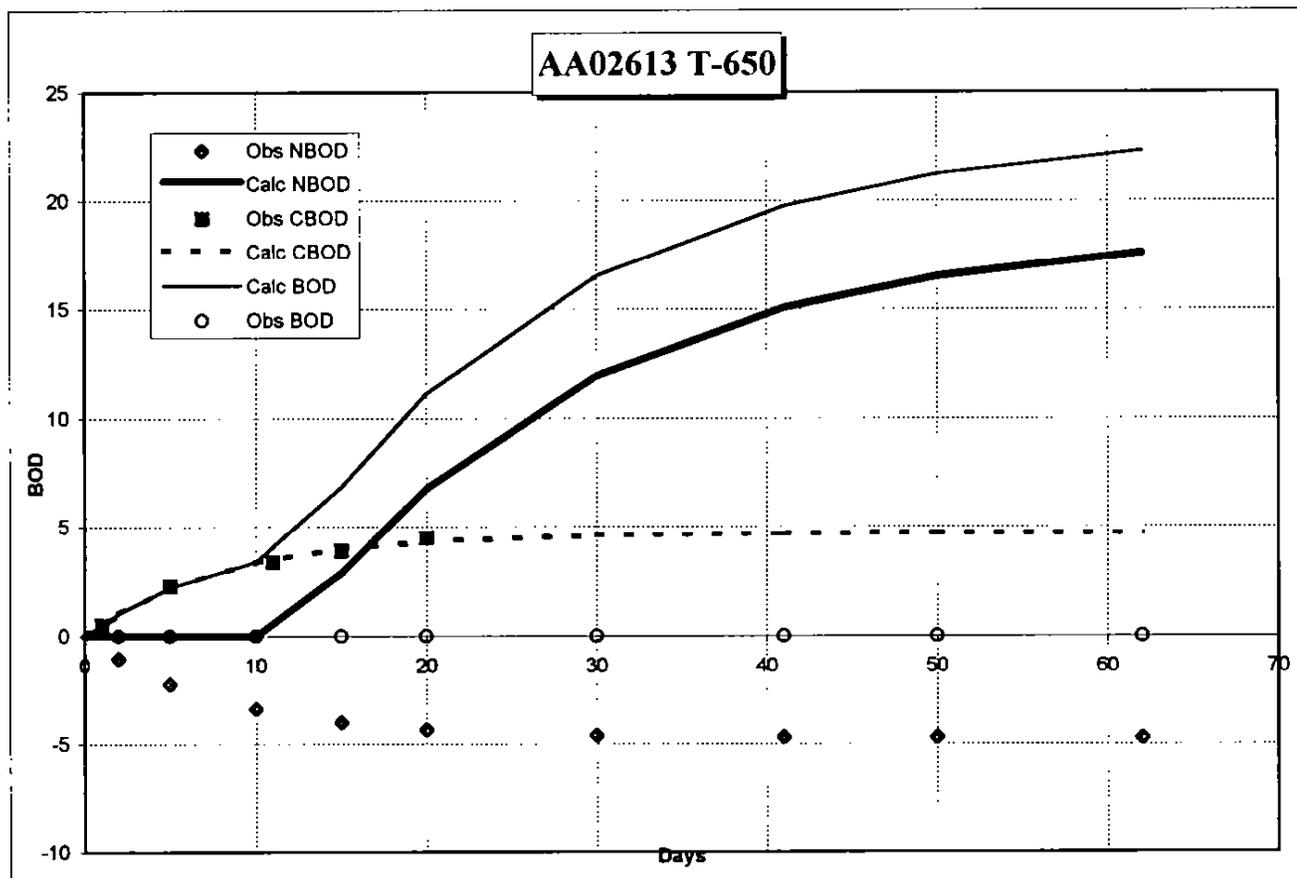
	9	1	5	11	15	20	28	40	48	60	UBOD	K	LAG
5-CP-7	1.00	5.00	11.00	15.00	20.00	28.00	40.00	48.00	60.00	66.46	0.159	2.93	
5-CP-8	6.10	17.60	49.00	61.00	62.00	62.00	62.00	66.50	69.60	66.46	0.129	3.00	
5-CP-1	4.90	8.30	8.30	9.00	9.00	9.00	9.00	9.00	9.30	9.43	0.226	-0.04	
5-CP-2	6.30	10.70	10.70	15.70	15.70	15.70	15.70	15.70	17.80	16.28	0.173	-0.80	

BOD Analysis of the for:
Bayou Plaquemine Brule near Egan, 10/13-14/98

Sample/Site # = AA02613 T-650

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
2	0	-1.02	0.50
5	0	-2.20	2.30
10	0	-3.39	3.40
15	0	-4.01	3.90
20	0	-4.34	4.50
30	0	-4.60	
41	0	-4.67	
50	0	-4.69	
62	0	-4.70	

Calculated: $BOD_t = UBOD[1 - e^{-k(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
1.02	0.00	1.02
2.20	0.00	2.20
3.39	0.00	3.39
6.89	2.88	4.01
11.12	6.79	4.34
16.54	11.94	4.60
19.75	15.07	4.67
21.20	16.51	4.69
22.27	17.58	4.70
UBOD	18.66	4.70
K	0.06	0.13
Lag	12.06	0.10
RMSE/UBOD (note 2)	18.65%	5.63%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

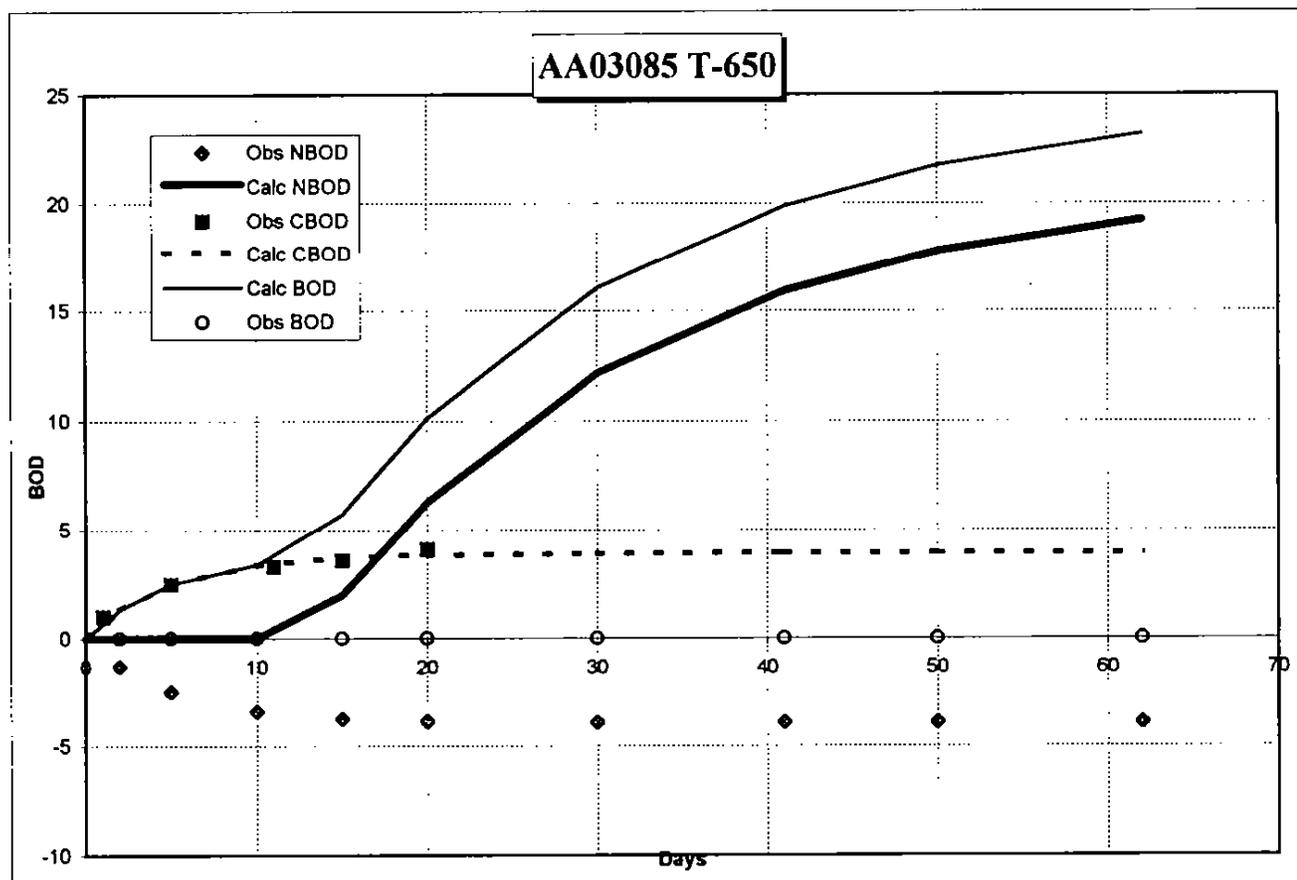
Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

BOD Analysis of the for:
Bayou Plaquemine Brule near Egan, 10/13-14/98

Sample/Site # = AA03085 T-650

Days	Measured		
	Total BOD	NBOD (note1)	CBOD
2	0	-1.30	1.00
5	0	-2.50	2.50
10	0	-3.40	3.30
15	0	-3.74	3.60
20	0	-3.86	4.10
30	0	-3.92	
41	0	-3.92	
50	0	-3.92	
62	0	-3.92	

Calculated: $BOD_t = UBOD[1 - e^{-K(t-lag)}]$		
Total BOD (NBOD+CBOD)	NBOD	CBOD
1.30	0.00	1.30
2.50	0.00	2.50
3.40	0.00	3.40
5.71	1.98	3.74
10.11	6.26	3.86
16.05	12.13	3.92
19.84	15.92	3.92
21.69	17.76	3.92
23.13	19.21	3.92
UBOD	20.92	3.92
K	0.05	0.20
Lag	13.06	0.00
RMSE/UBOD (note 2)	18.05%	11.32%



Note 1 - Measured NBOD is calculated by subtracting the calc.CBOD from the Measured Total BOD.

Note 2 - Square Root of the sum of the Standard Errors squared divided by the UBOD.

Bayou Plaquemine Brule

Rates and Concentrations from Prior Models and DMRs

Stream Name	Stream code	Reach no.	From - To (River Km)	SOD (gO ₂ -m ² /day)	COXY (1/day)	CSED (1/day)	NSED (1/day)	NOXY (1/day)	Nonpoint NBOD (lbs/day/mi)	Nonpoint CBOD (lbs/day/mi)	NBOD (mg/L)	NBOD of facility (mg/L)	CBOD (mg/L)	CBOD of facility (mg/L)	DC (mg/L)	DO (mg/L)	Nonpoint DO (mg/L)	Nonpoint Flow cfs/mi
Bayou Plaquemine Brule	PB	1	70.20 - 66.20		0.21	0.25	0.25	0.179			7.520		9.65			4.80		
Bayou Plaquemine Brule	PB	2	66.20 - 66.00		0.21	0.25	0.25	0.179								4.80		
Bayou Plaquemine Brule	PB	3	66.00 - 54.20	2.40	0.134	0.25	0.25	0.131	0	0.0		39.40		30.00	0.90		0.00	0.00
Bayou Plaquemine Brule	PB	4	54.20 - 40.20															
Bayou Plaquemine Brule	PB	5	40.20 - 32.20															
Bayou Plaquemine Brule	PB	6	32.20 - 31.40															
Atwood Gully	AG	7	0.20 - 0.00															
Atwood Bayou	AB	8	3.40 - 0.00															
Bayou Plaquemine Brule	PB	9	31.40 - 30.30															
Silis Gully	SG	10	0.40 - 0.00									9.03		16.10	7.80			
Silis Bayou	SB	11	4.70 - 0.00											11.50				
Bayou Wilkoff	BW	12	11.00 - 0.00															
Bayou Plaquemine Brule	PB	13	30.30 - 27.10															
Crowley High Gully	CG	14	1.90 - 0.00															
Bayou Plaquemine Brule	PB	15	27.10 - 21.70	1.00	0.12	0.05	0.00	0.03	0.00	0.71	9.300	25.80	5.50	10.80	7.80	3.50		0.00
Bayou Plaquemine Brule	PB	16	21.70 - 15.30															
Bayou Blanc Headwater	BB	17	25.70 - 23.20	2.59	0.038	0.0975	0.0675		171.96	192.72	11.77		13.69			5.30	0.00	2.14
Bayou Blanc	BB	18	23.20 - 22.80	0.94	0.049	0.259	0.152	0.097	48.45	27.70		44.51		28.41	4.20	1.12	0.181	0.000
Bayou Blanc Lake	BB	19	22.80 - 22.30	0.94	0.092	0.163	0.096	0.142	36.13	0.0						3.61	0.000	0.000
Bayou Blanc	BB	20	22.30 - 6.40	0.69	0.092	0.163	0.096	0.142	36.13	0.0						3.61	0.000	0.000
Bayou Blanc	BB	21	6.40 - 0.00	0.50	0.056	0.000	0.000	0.151	57.89	12.79						0.976	2.90	
Bayou Plaquemine Brule	PB	22	15.30 - 14.80		0.086			0.148										
North Coulee Trief	CT	23	1.00 - 0.00															
Bayou Plaquemine Brule	PB	24	14.80 - 12.00															
Bayou Plaquemine Brule	PB	25	12.00 - 6.00															
Bayou Plaquemine Brule	PB	26	6.00 - 0.00															

Blue shaded values are from previous model inputs and outputs.
Red shaded values are from the Church Point survey BOD data.

BAYOU PLAQUEMINE BRULE
Calibration Data

BAYOU BLANC CALIBRATION DATA
Rayne survey of July 18-23, 1993

Site No.	RM	RKm	TKN (mg/l)	TOC (mg/l)	TOC20 (mg/l)	UCBOD (mg/l)	UNBOD (mg/l)	DO (mg/l)	Temp (°C)	DO sat (mg/l)	pH	DOam (mg/l)	DOPm (mg/l)	UNBOD from TKN (mg/l)	Chloro- phyll a (ug/l)
2	13.28	25.26	6.98	16.1	6.71	26.74	33.56	0.90	29.37	7.69	7.09	0.44	0.56	30.01	5.14
3	12.30	23.69	4.58	12.8	5.07	15.98	29.07	1.69	30.08	7.56	7.39	1.00	1.50	19.69	5.69
L1	11.85	22.96	3.79	11.0	7.87	10.93	25.20	4.57	29.03	7.69	7.61			16.30	83.91
L2	11.70	22.72	2.90	9.7	9.93	16.88	20.86	17.30	33.77	7.18	8.75			12.47	331.07
5	11.42	22.27	2.63	11.1		16.15	19.20	7.33	29.91	7.56	8.02			11.31	20.13
6	10.33	20.51	2.01	10.6	8.07	7.95	17.81	5.92	31.99	7.31	8.10	2.63	4.09	8.64	116.95
7	8.20	17.09	1.58	10.0	5.40	13.91	5.04	4.16	34.17	7.07	7.69	3.94	4.31	6.79	4.29

Reach 16 25.70-23.20
Reach 17 23.20-22.30
Reach 18 22.30-6.40
Reach 19 6.40-0.00

BAYOU PLAQUEMINE BRULE CALIBRATION DATA
Church Point survey of 10/2-5/89

Site No.	RM	RKm	TKN (mg/l)	TOC (mg/l)	UCBOD (mg/l)	UNBOD (mg/l)	CAL UCBOD (mg/l)	CAL UNBOD (mg/l)	DO (mg/l)	Temp (°C)	pH
2 (5-CP-1)	43.00	67.06	1.15	12.0	8.93	0.80	9.65	7.52	4.80	21.80	8.00
2 (5-CP-2)					9.65	7.52					
3 (5-CP-13)	42.18	65.74	5.66	17.0	18.80	10.48	18.22	13.67	5.10	27.00	7.40
3 (5-CP-14)					17.63	16.85					
4 (5-CP-19)	41.88	65.26	5.93	17.6	20.45	21.20	21.46	23.60	6.40	28.20	7.50
4 (5-CP-20)					22.47	26.00					
5 (5-CP-25)	41.71	64.99	5.65	16.6	12.14	18.40	12.42	21.57	5.10	28.00	7.50
5 (5-CP-26)					12.69	24.74					
7 (5-CP-31)	38.66	60.08	4.31	13.4	17.06	12.61	15.07	13.29	14.95	26.56	8.30
7 (5-CP-32)					13.07	13.96					
7 (5-CP-31)					12.84	12.60	13.78	12.03	14.95	26.56	8.30
7 (5-CP-32)					14.72	11.45					

BAYOU PLAQUEMINE BRULE

Model Water Quality Input

Stream Name	Stream code	Reach no.	Reach bottom Rkm	Width (W) (meters)	Depth (D) (meters)	Characteristic flow (cms)	Velocity (m/s)	Velocity (fps)	Manning's n	Advection dispersion (m ² /s)	Tidal dispersion (m ² /s)	LA Ka (1/d)	TX Ka (1/d)	Measured Ka (1/d)	Input Ka (1/d)	SOD (gm-m ⁻² -s)	Input K _d (1/d)	CSED (1/d)	Input CSED (m/d)	Input K _d (1/d)	Input NSED (1/d)	Input NSED (mg/l)	Input INCRF (mg/l)	Input INCRF (mg/l)	Input INCRF (mg/l)	Input INCRF (mg/l)	Chloro-Phyl (1/d)	Input RSP CBOD (Kg/m/d)	Input RSP NBOD (Kg/m/d)
Bayou Plaquemine Brule	PB	1	66.2	5.45	0.32	0.03600	0.0206	0.0677	10.0	1.4800		3.00	2.00	2.13	3.00	2.00	0.130	0.050	0.016	0.100	0.050	0.016	4.63	6.80	6.80	4.89	15.00	10.00	
Bayou Plaquemine Brule	PB	2	66.0	7.38	0.44	0.06878	0.0212	0.0695			0.0	2.20	2.40	2.13	2.13	2.40	0.130	0.100	0.044	0.100	0.100	0.044	4.63	6.80	6.80	4.89	0.70	0.00	
Bayou Plaquemine Brule	PB	3	54.2	7.38	0.44	0.06176	0.0252	0.0626			1.9	2.33	2.40	2.13	2.13	2.40	0.130	0.100	0.044	0.100	0.100	0.044	4.63	6.80	6.80	4.89	220.00	0.00	
Bayou Plaquemine Brule	PB	4	40.2	12.0	0.66	0.11562	0.0112	0.0368			4.0	0.96	1.80	0.96	0.96	1.80	0.130	0.100	0.086	0.100	0.100	0.086	4.63	6.80	6.80	4.89	200.00	150.00	
Bayou Plaquemine Brule	PB	5	32.2	29.0	2.07	0.15429	0.0026	0.0064			5.3	0.34	0.20	0.34	0.20	0.34	0.130	0.100	0.207	0.100	0.100	0.207	4.63	6.80	6.80	4.89	680.00	600.00	
Bayou Plaquemine Brule	PB	6	31.4	30.0	2.14	0.19997	0.0031	0.0102			5.4	0.33	0.20	0.33	0.20	0.33	0.130	0.100	0.161	0.100	0.100	0.161	4.63	6.80	6.80	4.89	80.00	100.00	
Atwood Gully	AG	7		3.8	0.21	0.00067	0.0008	0.0028	10.0	0.0423		3.22	1.20	3.22	1.20	1.20	0.130	0.125	0.028	0.130	0.125	0.028	4.63	6.80	6.80	4.89	4.00	2.00	
Atwood Bayou	AB	8		3.9	0.22	0.00324	0.0038	0.0124	10.0	0.1979		3.27	1.20	3.27	1.20	1.20	0.130	0.125	0.028	0.130	0.125	0.028	4.63	6.80	6.80	4.89	80.00	100.00	
Bayou Plaquemine Brule	PB	9	30.3	26.0	1.86	0.20321	0.0042	0.0138			5.6	0.39	0.25	0.39	0.25	0.39	0.130	0.125	0.028	0.130	0.125	0.028	4.63	6.80	6.80	4.89	0.00	0.00	
Sills Gully	SG	10		4.2	0.24	0.01607	0.0159	0.0523	10.0	0.8994		3.72	2.40	3.72	2.40	2.40	0.130	0.250	0.060	0.130	0.250	0.060	4.63	6.80	6.80	4.89	0.00	0.00	
Sills Bayou	SB	11		4.3	0.25	0.02433	0.0228	0.0743	10.0	1.3210		3.95	2.40	3.95	2.40	2.40	0.130	0.250	0.063	0.130	0.250	0.063	4.63	6.80	6.80	4.89	0.00	0.00	
Bayou Wilkoff	BW	12		10.4	0.32	0.21266	0.0639	0.2096	10.0	4.5814		4.93	1.20	4.93	1.20	1.20	0.130	0.125	0.040	0.130	0.125	0.040	4.63	6.80	6.80	4.89	0.00	0.00	
Bayou Plaquemine Brule	PB	13	27.1	35.0	2.50	0.41867	0.0048	0.0156			6.0	0.29	0.20	0.29	0.20	0.29	0.130	0.075	0.188	0.046	0.050	0.125	4.63	6.80	6.80	4.89	418.00	400.00	
Crowley High Gully	CG	14		3.8	0.22	0.00162	0.0019	0.0064	10.0	0.1017		3.15	2.40	3.15	2.40	2.40	0.130	0.250	0.055	0.050	0.250	0.055	4.63	6.80	6.80	4.89	2.00	0.00	
Bayou Plaquemine Brule	PB	15	21.7	34.3	2.83	0.49961	0.0051	0.0169			6.9	0.26	0.18	0.26	0.18	0.26	0.130	0.050	0.143	0.030	0.000	0.000	4.63	6.80	6.80	4.89	615.00	325.00	
Bayou Plaquemine Brule	PB	16	15.3	40.2	2.85	0.49961	0.0044	0.0143			7.9	0.26	0.17	0.26	0.17	0.26	0.130	0.050	0.143	0.030	0.000	0.000	4.63	6.80	6.80	4.89	707.00	374.00	
Bayou Blanc	BB	17		3.9	0.21	0.06227	0.1127	0.3696	10.0	5.6864		10.84	4.28	3.10	3.10	3.00	0.050	0.259	0.054	0.097	0.152	0.032	4.63	6.80	6.80	4.89	0.00	0.00	
Bayou Blanc Lake	BB	18		39.2	0.30	0.06567	0.0082	0.0270	10.0	0.5539		2.60	1.00	2.60	1.00	1.00	0.090	0.163	0.049	0.142	0.096	0.029	4.63	6.80	6.80	4.89	0.00	0.00	
Bayou Blanc Lake	BB	19		39.2	0.30	0.06567	0.0082	0.0270	10.0	0.5539		2.61	1.52	2.61	1.52	1.52	0.090	0.163	0.049	0.142	0.096	0.029	4.63	6.80	6.80	4.89	331.00	0.00	
Bayou Blanc	BB	20		5.4	0.50	0.10017	0.0371	0.1217	10.0	3.8583		2.39	1.45	2.39	1.45	1.45	0.060	0.000	0.000	0.151	0.000	0.000	4.63	6.80	6.80	4.89	40.00	0.00	
Bayou Blanc	BB	21		20.0	1.43	0.10792	0.0036	0.0124			8.0	0.50	0.30	0.50	0.30	0.50	0.090	0.000	0.000	0.148	0.000	0.000	4.63	6.80	6.80	4.89	40.00	200.00	
Bayou Plaquemine Brule	PB	22	14.8	50.0	3.57	0.60753	0.0034	0.0112			8.0	0.20	0.13	0.20	0.13	0.20	0.130	0.050	0.179	0.030	0.000	0.000	4.63	6.80	6.80	4.89	55.00	100.00	
North Coulee Trief	CT	23		4.0	0.23	0.01336	0.0145	0.0476	10.0	0.7907		3.79	2.25	3.79	2.25	2.40	0.130	0.250	0.058	0.130	0.250	0.058	4.63	6.80	6.80	4.89	0.00	0.00	
Bayou Plaquemine Brule	PB	24	12.0	48.0	3.43	0.62069	0.0038	0.0124			8.4	0.21	0.14	0.21	0.14	0.21	0.130	0.050	0.172	0.030	0.000	0.000	4.63	6.80	6.80	4.89	385.00	270.00	
Bayou Plaquemine Brule	PB	25	6.0	63.0	4.50	0.62069	0.0022	0.0072			9.3	0.15	0.09	0.15	0.09	0.15	0.130	0.050	0.225	0.030	0.000	0.000	4.63	6.80	6.80	4.89	1250.00	300.00	
Bayou Plaquemine Brule	PB	26	0.0	52.0	3.71	0.66731	0.0035	0.0113			10.2	0.19	0.13	0.19	0.13	0.19	0.130	0.050	0.186	0.030	0.000	0.000	4.63	6.80	6.80	4.89	1250.00	300.00	

Bayou Plaquemine Brule Ecn.'s

W = 0.0645(X) - 9.9295

D = 0.005(X) - 0.805

BAYOU PLAQUEMINE BRULE CALIBRATION DATA
Assessment site at Egan

Date	RM	RKm	TKN (mg/l)	TKNx4.3 (mg/l)	TOC (mg/l)	TOC20 (mg/l)	UCBOD (mg/l)	UNBOD (mg/l)	DO (mg/l)	Temp (°C)	pH
10/13-14/98	3.21	5.17	1.34	5.76	9.70	4.7	3.92	2.59	27.35	7.54	
11/9-10/98							4.31				
Average											

BAYOU PLAQUEMINE BRULE CALIBRATION DATA
Estherwood ambient monitoring site

Ambient average data for period of record:

Period of record	RM	RKm	TKN (mg/l)	TOC (mg/l)	UCBOD (mg/l)	TKNx4.3 (mg/l)	DO (mg/l)	Temp (°C)	pH
July-Sept, 1989-	8.15	13.12	1.65	9.03	7.10	3.04	27.08		

BAYOU PLAQUEMINE BRULE CALIBRATION DATA
Crowley survey of 8/29/93 - 9/2/93

Sample run	RM	RKm	TKN (mg/l)	TKNx4.3 (mg/l)	TOC (mg/l)	UCBOD (mg/l)	UNBOD (mg/l)	DO at (mg/l)	Depth (ft)
A	14.72	23.43	1.25	5.38	9.20	7.64	5.74	4.34	mid
B	14.68	23.37	1.23	5.29	7.00	3.50	9.50	2.70	7.5
C	14.77	23.51	1.31	5.63	9.50	5.45	12.19	3.39	6
D	14.28	22.72	1.30	5.59	8.90	4.99	8.97	4.52	6
E	14.27	22.71	0.98	4.21	8.40	5.04	6.43	3.05	6
F	14.28	22.72	1.21	5.20	6.70	4.50	14.25	3.81	6
G	14.19	22.58	1.20	5.16	8.50	7.85	8.03	3.00	6
H	13.32	21.18	1.06	4.56	7.60	5.23	8.97	2.96	6
Average		22.78	1.19	5.13	7.60	5.53	9.26	3.47	

Texas Natural Resource Conservation Commission
 QUAL-TX model Version 3.4 Updated December 1995

Output produced at 22:48 hours on 03/20/1999

\$\$\$ DATA TYPE 1 (TITLES AND CONTROL CARDS) \$\$\$

CARD TYPE:	CONTROL TITLES
CONTROL01	BAYOU PLACEMENT BRULE MARKSHEET
CONTROL02	CALIBRATION RUN
CONTROL03	ECHO DATA INPUT
CONTROL04	INTERMEDIATE SUMMARY
CONTROL05	CAPSULE SUMMARY
CONTROL06	FINAL REPORT
CONTROL07	LOADING SUMMARY
CONTROL08	SPECIAL REPORT
CONTROL09	LINE PRINTER PLOT
CONTROL10	GRAPHICS CAPABILITY
CONTROL11	SEQUENCING OUTPUT
CONTROL12	METRIC UNITS
CONTROL13	OXYGEN DEPENDENT RATES
CONTROL14	SENSITIVITY ANALYSIS
CONTROL15	OVERLAY PLOT
ENDATA01	

\$\$\$ DATA TYPE 2 (MODEL OPTIONS) \$\$\$

CARD TYPE	MODEL OPTION	
MODEL001	TEMPERATURE	
MODEL002	SALINITY	
MODEL003	CONSERVATIVE MATERIAL I - CHLORIDES	IN MG/L
MODEL004	CONSERVATIVE MATERIAL II - SULFATES	IN MG/L
MODEL005	DISSOLVED OXYGEN	
MODEL006	BIOCHEMICAL OXYGEN DEMAND - UCBD	
MODEL007	NITROGEN	
MODEL008	PHOSPHORUS	
MODEL009	CHLOROPHYLL A	
MODEL010	MACROPHYTES	
MODEL011	COLIFORM	
MODEL012	NONCONSERVATIVE MATERIAL - NBOD	IN MG/L
ENDATA02		

\$\$\$ DATA TYPE 3 (PROGRAM CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
PROGRAM	MAXIMUM ITERATION LIMIT	200.00000
PROGRAM	PILOT CONTROL VALUE	3.00000
PROGRAM	INTERMEDIATE REPORT TYPE	4.00000
PROGRAM	FINAL REPORT TYPE	1.00000
PROGRAM	BOD OXYGEN UPTAKE RATE	1.00000
PROGRAM	HCM OXYGEN UPTAKE RATE	1.00000
PROGRAM	INHIBITION CONTROL VALUE	2.00000
PROGRAM	TIDE HEIGHT (METERS)	.07600
PROGRAM	DISPERSION EQUATION	1.00000
PROGRAM	ALGAE OXYGEN PROD	.03000
PROGRAM	OCEAN EXCHANGE RATIO	1.00000

\$\$\$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) \$\$\$

CARD TYPE	RATE CODE	THETA VALUE
TEMP	BEIRTHAL	1.06500
TEMP	BOD SETT	1.00000
TEMP	HCM DRCA	1.07000
TEMP	HCM SETT	1.00000

\$\$\$ CONSTANTS TYPE 5 (TEMPERATURE DATA) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA05		

\$\$\$ DATA TYPE 6 (ALGAE CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA06		

\$\$\$ DATA TYPE 7 (MACROPHYTE CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA07		

\$\$\$ DATA TYPE 8 (REACH IDENTIFICATION DATA) \$\$\$

CARD TYPE	REACH	ID	NAME	BEGIN REACH KM	END REACH KM	ELEM LENGTH KM	REACH LENGTH KM	ELEMS PER REACH	BEGIN ELEM NUM	END ELEM NUM
REACH ID	1	PB	FREE FLOWING W/CHURCH POINT	70.20	66.20	.2000	4.00	20	1	20
REACH ID	2	PB	POOLED REACH BELOW CHURCH POINT	66.20	66.00	.2000	.20	1	21	21
REACH ID	3	PB	POOLED REACH TO HAZELWOOD GULLY	66.00	54.20	.2000	11.80	59	22	80
REACH ID	4	PB	HAZELWOOD GULLY TO COLES GULLY	54.20	40.20	1.0000	14.00	14	81	94
REACH ID	5	PB	COLES GULLY TO LONGPOINT GULLY	40.20	32.20	1.0000	8.00	8	95	102
REACH ID	6	PB	LONGPOINT GULLY TO ATWOOD BAYOU	32.20	31.40	.4000	.80	2	103	104
REACH ID	7	AG	ATWOOD GULLY	3.60	3.40	.1000	.20	2	105	106
REACH ID	8	AB	ATWOOD BAYOU TO BPB	3.40	.00	.1000	3.40	34	107	140
REACH ID	9	PB	ATWOOD BAYOU TO BAYOU WIKOFF	31.40	30.30	.5500	1.10	2	141	142
REACH ID	10	SG	STILLS GULLY	16.10	15.70	.1000	.40	4	143	146
REACH ID	11	SB	STILLS BAYOU	15.70	11.00	.1000	4.70	47	147	193
REACH ID	12	BW	BAYOU WIKOFF TO BPB	11.00	TO	1.0000	11.00	11	194	204
REACH ID	13	PB	BAYOU WIKOFF TO CROWLEY HIGH G.	30.30	TO	.8000	3.20	4	205	208
REACH ID	14	CG	CROWLEY HIGH TO BPB	1.90	TO	.1000	1.90	19	209	227
REACH ID	15	PB	CROWLEY HIGH GULLY TO ROLLER C.	27.10	TO	.2000	5.40	32	228	254
REACH ID	16	PB	ROLLER CANAL TO BAYOU BLANC	21.70	TO	.2000	6.40	32	255	286
REACH ID	17	BB	RAYNE POTW TO LAKE	25.70	TO	1.000	2.50	25	287	311
REACH ID	18	BB	LAKE	23.20	TO	.1000	.40	4	312	315
REACH ID	19	BB	LAKE	22.80	TO	.1000	.50	5	316	320
REACH ID	20	BB	LAKE TO RK 6.4	22.30	TO	.3000	15.90	53	321	373
REACH ID	21	BB	RK 6.4 TO BPB	6.40	TO	.4000	6.40	16	374	389
REACH ID	22	PB	BAYOU BLANC TO N. COULEE TRIFF	15.30	TO	.1000	.50	5	390	394
REACH ID	23	CT	ESTHERWOOD TO BPB	1.00	TO	.1000	1.00	10	395	404
REACH ID	24	PB	BELOW N. COULEE TRIFF	14.80	TO	1.000	2.80	28	405	432
REACH ID	25	PB	ABOVE BAYOU JONAS	12.00	TO	1.0000	6.00	6	433	438
REACH ID	26	PB	BAYOU JONAS TO BAYOU DES CANNES	6.00	TO	1.0000	6.00	6	439	444

\$\$\$ DATA TYPE 9 (ADVECTIVE HYDRAULIC COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	VELOCITY "A"	VELOCITY "B"	DEPTH "C"	DEPTH "D"	DEPTH "E"	MANNINGS "N"
HYDR-1	1	PB	.06390000	.340	.560	.360	.150	10.000
HYDR-1	2	PB	.30800000	1.000	.000	.360	.440	.000
HYDR-1	3	PB	.30800000	1.000	.000	.360	.440	.000
HYDR-1	4	PB	.09630000	1.600	.000	.450	.860	.000
HYDR-1	5	PB	.01670000	1.000	.000	.450	2.070	.000
HYDR-1	6	PB	.01560000	1.000	.000	.450	2.140	.000
HYDR-1	7	AG	.01010000	1.000	.830	.360	.150	10.000
HYDR-1	8	AB	.02650000	.340	.550	.360	2.140	10.000
HYDR-1	9	PB	.02070000	1.000	.000	.450	1.860	.000
HYDR-1	10	SG	.06490000	.340	.400	.360	.150	10.000
HYDR-1	11	SB	.08010000	.340	.380	.360	.150	10.000
HYDR-1	12	BW	.12430000	.430	.220	.450	.210	10.000
HYDR-1	13	PB	.01140000	1.000	.000	.450	2.500	.000
HYDR-1	14	CG	.01720000	.340	.710	.360	.150	10.000
HYDR-1	15	PB	.01030000	1.000	.000	.450	2.830	.000

HYDR-1	16	PB	.00870000	1.000	.000	.450	2.850	.000
HYDR-1	17	BB	.25330000	.340	.140	.360	.150	10.000
HYDR-1	18	BB	.08500000	1.000	.000	.450	.300	10.000
HYDR-1	19	BB	.08500000	1.000	.000	.450	.300	10.000
HYDR-1	20	BB	.08110000	.340	.800	.360	.150	10.000
HYDR-1	21	BB	.03500000	1.000	.000	.450	1.430	.000
HYDR-1	22	BB	.00550000	1.000	.000	.450	3.570	.000
HYDR-1	23	CF	.06300000	.340	.380	.360	.150	10.000
HYDR-1	24	PB	.00610000	1.000	.000	.450	4.500	.000
HYDR-1	25	PB	.00350000	1.000	.000	.450	4.500	.000
HYDR-1	26	PB	.00520000	1.000	.000	.450	3.710	.000

ENDATA09

\$\$\$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR-2	2	PB	.18	.000	.000	.000	.000
HYDR-2	3	PB	.18	1.900	.000	.000	.000
HYDR-2	4	PB	.39	4.000	.000	.000	.000
HYDR-2	5	PB	.51	5.300	.000	.000	.000
HYDR-2	6	PB	.53	5.400	.000	.000	.000
HYDR-2	9	PB	.54	5.600	.000	.000	.000
HYDR-2	13	PB	.59	6.000	.000	.000	.000
HYDR-2	15	PH	.67	6.900	.000	.000	.000
HYDR-2	16	PB	.77	7.900	.000	.000	.000
HYDR-2	21	BB	.78	8.000	.000	.000	.000
HYDR-2	22	PB	.78	8.000	.000	.000	.000
HYDR-2	24	PH	.82	8.400	.000	.000	.000
HYDR-2	25	PB	.91	9.300	.000	.000	.000
HYDR-2	26	PB	1.00	10.200	.000	.000	.000

ENDATA10

\$\$\$ DATA TYPE 11 (INITIAL CONDITIONS) \$\$\$

CARD TYPE	REACH	ID	TEMP	SALIN	DO	PH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	PB	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	2	PB	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	3	PB	26.00	.14	3.00	1.00	1.00	1.00	220.00	.00
INITIAL	4	PB	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	5	PB	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	6	PB	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	7	AG	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	8	AR	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	9	PR	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	10	SG	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	11	SB	26.00	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	12	BW	28.50	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	13	EB	28.50	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	14	CG	28.50	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	15	PR	30.00	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	16	PB	30.00	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	17	BR	28.50	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	18	BB	29.50	.12	3.00	1.00	1.00	1.00	.00	.00
INITIAL	19	BB	29.50	.12	3.00	1.00	1.00	1.00	331.00	.00
INITIAL	20	BB	31.40	.13	3.00	1.00	1.00	1.00	40.00	.00
INITIAL	21	BR	30.00	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	22	PB	30.00	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	23	CT	28.50	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	24	PB	30.00	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	25	PB	30.00	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	26	PR	30.00	.10	3.00	1.00	1.00	1.00	.00	.00

\$\$\$ DATA TYPE 12 (REGENERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AEROB BOD DECAY	BOD SETT	HOD CONTY TO SOD	ANAER BOD DECAY
COEF-1	1	PB	1.	3.000	.000	.000	2.000	.130	.016	.000	.000
COEF-1	2	PR	1.	2.130	.000	.000	2.400	.130	.041	.000	.000
COEF-1	3	PB	1.	2.130	.000	.000	2.400	.130	.041	.000	.000
COEF-1	4	PB	1.	.960	.000	.000	1.800	.130	.086	.000	.000
COEF-1	5	PB	1.	.340	.000	.000	.500	.130	.207	.000	.000
COEF-1	6	PB	1.	.330	.000	.000	.500	.130	.161	.000	.000
COEF-1	7	AG	1.	3.220	.000	.000	2.400	.130	.053	.000	.000
COEF-1	8	AB	1.	3.270	.000	.000	1.200	.130	.028	.000	.000
COEF-1	9	PB	1.	.390	.000	.000	.500	.120	.140	.000	.000
COEF-1	10	SG	1.	3.720	.000	.000	2.400	.130	.060	.000	.000
COEF-1	11	SB	1.	3.950	.000	.000	2.100	.130	.063	.000	.000
COEF-1	12	BW	1.	4.930	.000	.000	1.200	.130	.040	.000	.000
COEF-1	13	PU	1.	.290	.000	.000	.500	.120	.188	.000	.000
COEF-1	14	CG	1.	3.150	.000	.000	2.400	.130	.055	.000	.000

COEF-4 17 B3 .00 .10 .03 .00
 COEF-4 18 BB .00 .14 .03 .00
 COEF-4 19 BB .00 .14 .03 .00
 COEF-4 20 BB .00 .15 .00 .00
 COEF-4 21 BB .00 .15 .00 .00
 COEF-4 22 PB .00 .03 .00 .00
 COEF-4 23 CT .00 .13 .06 .00
 COEF-4 24 PA .00 .03 .00 .00
 COEF-4 25 PB .00 .03 .00 .00
 COEF-4 26 PB .00 .03 .00 .00
 ENDATA15

\$\$\$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) \$\$\$

CARD TYPE	REACH	ID	OUTFLOW	INFLOW	TEMP	SALIN	CH-I	CH-II	INFLOW/DIST
INCR-1	1	PB	.00000	.00440	.00	.00	.00	.00	.00110
INCR-1	2	PB	.00000	.00020	.00	.00	.00	.00	.00100
INCR-1	3	PB	.00000	.01300	.00	.00	.00	.00	.00110
INCR-1	4	PA	.00000	.01540	.00	.00	.00	.00	.00110
INCR-1	5	PB	.00000	.00880	.00	.00	.00	.00	.00110
INCR-1	6	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	7	AG	.00000	.00010	.00	.00	.00	.00	.00050
INCR-1	8	AB	.00000	.00170	.00	.00	.00	.00	.00050
INCR-1	9	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	10	SS	.00000	.00020	.00	.00	.00	.00	.00050
INCR-1	11	SB	.00000	.00240	.00	.00	.00	.00	.00051
INCR-1	12	EM	.00000	.11000	.00	.00	.00	.00	.01000
INCR-1	13	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	14	CG	.00000	.00060	.00	.00	.00	.00	.00032
INCR-1	15	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	16	PR	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	17	BB	.00000	.01750	.00	.00	.00	.00	.00000
INCR-1	18	BB	.00000	.00360	.00	.00	.00	.00	.00900
INCR-1	19	BB	.00000	.00450	.00	.00	.00	.00	.00900
INCR-1	20	B3	.00000	.00000	.00	.00	.00	.00	.00900
INCR-1	21	BB	.00000	.00780	.00	.00	.00	.00	.00021
INCR-1	22	PU	.00000	.00000	.00	.00	.00	.00	.00122
INCR-1	23	CT	.00000	.00040	.00	.00	.00	.00	.00000
INCR-1	24	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	25	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	26	PR	.00000	.00000	.00	.00	.00	.00	.00000

ENDATA15

\$\$\$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	REACH	ID	DO	BOD	ORG-N	NH3	NO3+2
INCR-2	1	PR	4.89	4.63	.00	.00	.00
INCR-2	2	PR	4.89	4.63	.00	.00	.00
INCR-2	3	PR	4.89	4.63	.00	.00	.00

CARD TYPE	REACH	ID	PHOS	CHL. A	COLI	TICM
INCR-2	4	PB	4.89	4.63	.00	.00
INCR-2	5	PB	4.89	4.63	.00	.00
INCR-2	6	PB	4.89	4.63	.00	.00
INCR-2	7	AG	4.89	4.63	.00	.00
INCR-2	8	AB	4.89	4.63	.00	.00
INCR-2	9	PB	4.89	4.63	.00	.00
INCR-2	10	SG	4.89	4.63	.00	.00
INCR-2	11	SR	4.89	4.63	.00	.00
INCR-2	12	BW	4.89	4.63	.00	.00
INCR-2	13	PU	4.89	4.63	.00	.00
INCR-2	14	CG	4.89	4.63	.00	.00
INCR-2	15	PH	4.89	4.63	.00	.00
INCR-2	16	PB	4.89	4.63	.00	.00
INCR-2	17	BB	4.89	4.63	.00	.00
INCR-2	18	BB	4.89	4.63	.00	.00
INCR-2	19	BB	4.89	4.63	.00	.00
INCR-2	20	RB	4.89	4.63	.00	.00
INCR-2	21	BB	4.89	4.63	.00	.00
INCR-2	22	PH	4.89	4.63	.00	.00
INCR-2	23	CT	4.89	4.63	.00	.00
INCR-2	24	PB	4.89	4.63	.00	.00
INCR-2	25	PB	4.89	4.63	.00	.00
INCR-2	26	PB	4.89	4.63	.00	.00

ENDATA17

\$\$\$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	REACH	ID	PHOS	CHL. A	COLI	TICM
INCR-3	1	PH	.00	.00	.00	6.80
INCR-3	2	PB	.00	.00	.00	6.80
INCR-3	3	PB	.00	.00	.00	6.80
INCR-3	4	PB	.00	.00	.00	6.80
INCR-3	5	PB	.00	.00	.00	6.80
INCR-3	6	PR	.00	.00	.00	6.80
INCR-3	7	AG	.00	.00	.00	6.80
INCR-3	8	AB	.00	.00	.00	6.80
INCR-3	9	PB	.00	.00	.00	6.80
INCR-3	10	SG	.00	.00	.00	6.80
INCR-3	11	SB	.00	.00	.00	6.80
INCR-3	12	BW	.00	.00	.00	6.80
INCR-3	13	PB	.00	.00	.00	6.80
INCR-3	14	CG	.00	.00	.00	6.80
INCR-3	15	PB	.00	.00	.00	6.80
INCR-3	16	PH	.00	.00	.00	6.80
INCR-3	17	BB	.00	.00	.00	6.80
INCR-3	18	BB	.00	.00	.00	6.80
INCR-3	19	BB	.00	.00	.00	6.80
INCR-3	20	RB	.00	.00	.00	6.80
INCR-3	21	BB	.00	.00	.00	6.80
INCR-3	22	PB	.00	.00	.00	6.80
INCR-3	23	CT	.00	.00	.00	6.80
INCR-3	24	PB	.00	.00	.00	6.80
INCR-3	25	PB	.00	.00	.00	6.80

INCR-3
ENDPTA18

26 PB

.00

.00

.00

6.80

\$\$\$ DATA TYPE 19 (NONPOINT SOURCE DATA) \$\$\$

CARD TYPE	REACH	ID	BOD	ORG-N	COLI	NCM	DO
NONPOINT	1	PB	15.00	.00	.00	10.00	.00
NONPOINT	2	PR	.70	.00	.00	.00	.00
NONPOINT	3	PB	39.30	.00	.00	.00	.00
NONPOINT	4	PR	200.00	.00	.00	150.00	.00
NONPOINT	5	PB	680.00	.00	.00	600.00	.00
NONPOINT	6	PB	80.00	.00	.00	100.00	.00
NONPOINT	7	AG	.00	.00	.00	.00	.00
NONPOINT	8	AB	4.00	.00	.00	2.00	.00
NONPOINT	9	PB	80.00	.00	.00	100.00	.00
NONPOINT	10	SG	.00	.00	.00	.00	.00
NONPOINT	11	SB	.00	.00	.00	.00	.00
NONPOINT	12	BW	.00	.00	.00	.00	.00
NONPOINT	13	PB	118.00	.00	.00	400.00	.00
NONPOINT	14	CG	2.00	.00	.00	.00	.00
NONPOINT	15	PR	615.00	.00	.00	325.00	.00
NONPOINT	16	PR	707.00	.00	.00	374.00	.00
NONPOINT	17	BB	.00	.00	.00	.00	.00
NONPOINT	18	BB	.00	.00	.00	.00	.00
NONPOINT	19	BB	.00	.00	.00	.00	.00
NONPOINT	20	BB	.00	.00	.00	.00	.00
NONPOINT	21	BB	40.00	.00	.00	250.00	.00
NONPOINT	22	PB	55.00	.00	.00	100.00	.00
NONPOINT	23	CT	.00	.00	.00	.00	.00
NONPOINT	24	PR	385.00	.00	.00	270.00	.00
NONPOINT	25	PR	1250.00	.00	.00	300.00	.00
NONPOINT	26	PB	1250.00	.00	.00	350.00	.00

\$\$\$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	B. PLAQUEMINE BRULE	0	.03160	.000	.000	.000	.000
HDWTR-1	105	ATWOOD GULLY	0	.00000	.000	.000	.000	.000
HDWTR-1	143	SILAS GULLY	0	.01543	.000	.000	.000	.000
HDWTR-1	209	CROWLEY HIGH GULLY	0	.00000	.000	.000	.000	.000
HDWTR-1	287	BAYOU BLANC	0	.01814	.000	.000	.000	.000
HDWTR-1	395	N. COULLEE TRIEF	0	.00919	.000	.000	.000	.000
ENDATA20								

\$\$\$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
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HDWTR-2	1	B. PLAQUEMINE BRULE	4.80	9.65	.00	.00	.00	.00
HDWTR-2	105	ATWOOD GULLY	4.89	4.63	.00	.00	.00	.00
HDWTR-2	143	STILLS GULLY	4.80	9.49	.00	.00	.00	.00
HDWTR-2	209	CROWLEY HIGH GULLY	1.89	4.63	.00	.00	.00	.00
HDWTR-2	287	BAYOU BLANC	5.30	13.69	.00	.00	.00	.00
HDWTR-2	395	H. COULEE TRIEF	4.80	9.49	.00	.00	.00	.00

\$\$\$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

HDWTR-3	1	B. PLAQUEMINE BRULE	.00	.00	.00	7.52
HDWTR-3	105	ATWOOD GULLY	.00	.00	.00	6.80
HDWTR-3	143	STILLS GULLY	.00	.00	.00	1.73
HDWTR-3	209	CROWLEY HIGH GULLY	.00	.00	.00	6.80
HDWTR-3	287	BAYOU BLANC	.00	.00	.00	11.77
HDWTR-3	395	H. COULEE TRIEF	.00	.00	.00	1.73

\$\$\$ DATA TYPE 23 (JUNCTION DATA) \$\$\$

JUNCTION	141	104	ATWOOD BAYOU CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	205	142	BAYOU WIKOFF CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	228	208	CROWLEY HIGH GULLY CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	390	286	BAYOU BLANC CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	405	394	H. COULEE TRIEF CONFLUENCE WITH BAYOU PLAQUEMINE BRULE

\$\$\$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) \$\$\$

WSTLD-1	18	CHURCH POINT POTW	.03256	.000	.000	.000	.000	.000
WSTLD-1	80	HAZELWOOD GULLY	.01846	.000	.000	.000	.000	.000
WSTLD-1	94	COLES GULLY	.02987	.000	.000	.000	.000	.000
WSTLD-1	102	LONG POINT GULLY	.04568	.000	.000	.000	.000	.000
WSTLD-1	105	ATWOOD AGRUS	.00057	.000	.000	.000	.000	.000
WSTLD-1	107	U. ATWOOD BAYOU	.00087	.000	.000	.000	.000	.000
WSTLD-1	143	AGAUDIAN FINE FOODS	.00044	.000	.000	.000	.000	.000
WSTLD-1	147	U. STILLS BAYOU	.00245	.000	.000	.000	.000	.000
WSTLD-1	150	N. RAYNE POTW	.00346	.000	.000	.000	.000	.000
WSTLD-1	194	U. BAYOU WIKOFF	.07833	.000	.000	.000	.000	.000
WSTLD-1	209	CROWLEY HIGH SCHOOL	.00105	.000	.000	.000	.000	.000
WSTLD-1	247	CROWLEY POTW	.08212	.000	.000	.000	.000	.000
WSTLD-1	287	RAYNE POTW	.05663	.000	.000	.000	.000	.000
WSTLD-1	395	ESTHERWOOD POTW	.00377	.000	.000	.000	.000	.000

WSTLD-1
EUDATA24

438

BAYOU JOHNS

.04642

.000

.000

.000

.000

\$\$\$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	ELEMENT	NAME	DO	BOD	% BOD RVAL	ORG-N	NH3	NITRITE	NO3+2
WSTLD-2	18	CHURCH POINT POTW	.99	30.00	.00	.00	.00	.00	.00
WSTLD-2	80	HAZELWOOD GULLY	4.90	4.60	.00	.00	.00	.00	.00
WSTLD-2	94	COLES GULLY	4.90	4.60	.00	.00	.00	.00	.00
WSTLD-2	102	LONG POINT GULLY	4.30	4.63	.00	.00	.00	.00	.00
WSTLD-2	105	ATWOOD ACRES	2.00	48.30	.00	.00	.00	.00	.00
WSTLD-2	107	U. ATWOOD BAYOU	4.80	9.50	.00	.00	.00	.00	.00
WSTLD-2	143	ACADIAN FINE FOODS	7.80	16.10	.00	.00	2.10	.00	.00
WSTLD-2	147	U. SILLS BAYOU	4.80	9.50	.00	.00	.00	.00	.00
WSTLD-2	150	N. RAYNE POTW	2.00	11.50	.00	.00	.00	.00	.00
WSTLD-2	194	U. BAYOU WIKOFF	4.80	9.50	.00	.00	.00	.00	.00
WSTLD-2	209	CROWLEY HIGH SCHOOL	2.00	75.90	.00	.00	.00	.00	.00
WSTLD-2	247	CROWLEY POTW	7.80	10.80	.00	.00	.00	.00	.00
WSTLD-2	287	RAYNE POTW	4.20	28.40	.00	.00	.00	.00	.00
WSTLD-2	395	ESTHERWOOD POTW	.00	9.93	.00	.00	3.47	.00	.00
WSTLD-2	438	BAYOU JOINS	4.90	4.60	.00	.00	.00	.00	.00
ENDATA25									

\$\$\$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	PHOS	CHL. A	COLI	PCB
WSTLD-3	18	CHURCH POINT POTW	.00	.00	.00	39.40
WSTLD-3	80	HAZELWOOD GULLY	.00	.00	.00	6.80
WSTLD-3	94	COLES GULLY	.00	.00	.00	6.80
WSTLD-3	102	LONG POINT GULLY	.00	.00	.00	6.80
WSTLD-3	105	ATWOOD ACRES	.00	.00	.00	51.63
WSTLD-3	107	U. ATWOOD BAYOU	.00	.00	.00	1.70
WSTLD-3	143	ACADIAN FINE FOODS	.00	.00	.00	9.00
WSTLD-3	147	U. SILLS BAYOU	.00	.00	.00	1.70
WSTLD-3	150	N. RAYNE POTW	.00	.00	.00	43.00
WSTLD-3	194	U. BAYOU WIKOFF	.00	.00	.00	1.70
WSTLD-3	209	CROWLEY HIGH SCHOOL	.00	.00	.00	64.50
WSTLD-3	247	CROWLEY POTW	.00	.00	.00	25.80
WSTLD-3	287	RAYNE POTW	.00	.00	.00	44.50
WSTLD-3	395	ESTHERWOOD POTW	.00	.00	.00	19.40
WSTLD-3	438	BAYOU JOINS	.00	.00	.00	6.80
ENDATA26						

\$\$\$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) \$\$\$

CARD TYPE	CONSTITUENT	CONCENTRATION
LOWER BC	TEMPERATURE	21.060 DEG C
LOWER BC	SALINITY	.900 PPT

LOWER BC CONSERVATIVE MATERIAL I = .000 MG/L
 LOWER BC CONSERVATIVE MATERIAL II = .000 MG/L
 LOWER BC DISSOLVED OXYGEN = 4.260 MG/L
 LOWER BC BIOCHEMICAL OXYGEN DEMAND = 5.720 MG/L
 LOWER BC ORGANIC NITROGEN = .000 MG/L
 LOWER BC AMMONIA NITROGEN = .000 MG/L
 LOWER BC NITRATE+NITRITE NITROGEN = .000 MG/L
 LOWER BC PHOSPHORUS = .000 MG/L
 LOWER BC CHLOROPHYLL A = .000 UG/L
 LOWER BC COLIFORM = .000 #/100 ML
 LOWER BC NONCONSERVATIVE MATERIAL = 5.120 MG/L
 ENDDATA27

\$\$\$ DATA TYPE 28 (FLOW AUGMENTATION DATA) \$\$\$

CARD TYPE REACH AVAIL HDWS TARGET ORDER OF AVAIL. SOURCES
 ENDDATA28

\$\$\$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) \$\$\$

CARD TYPE	PARAMETER	COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7	COL 8
ENDDATA29									

\$\$\$ DATA TYPE 30 (PLOT CONTROL CARDS) \$\$\$

NUMBER OF PLOTS = 3
 NUMBER OF REACHES IN PLOT 1 = 3 INCREMENT = .20
 PLOT RCH 1 2 3
 NUMBER OF REACHES IN PLOT 2 = 5 INCREMENT = .20
 PLOT RCH 17 18 19 20 21
 NUMBER OF REACHES IN PLOT 3 = 14 INCREMENT = .50
 PLOT RCH 1 2 3 4 5 6 9 13 15 16 22 24 25 26
 ENDDATA30

.....NO ERRORS DETECTED IN INPUT DATA

.....HYDRAULIC CALCULATIONS COMPLETED

- 1
-
-
-
-
-

.....TRIAGONAL MATRIX TERMS INITIALIZED

□

.....ORIGIN DEPENDENT RATHS CONVERGENT IN 8 ITERATIONS

□

.....CONSTITUENT CALCULATIONS COMPLETED

INTERMEDIATE REPORT
 DISSOLVED OXYGEN

MG/L

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	1	1	4.70	4.65	4.61	4.58	4.57	4.55	4.54	4.54	4.54	4.53
PB	1	11	4.53	4.54	4.54	4.53	4.51	4.47	4.05	3.10	3.27	3.49
PB	2	21	4.46									
PB	3	22	5.28	5.83	6.26	6.60	6.86	7.06	7.21	7.33	7.41	7.46
PB	3	32	7.49	7.51	7.51	7.50	7.48	7.45	7.41	7.37	7.33	7.28
PB	3	42	7.22	7.17	7.11	7.05	6.98	6.92	6.85	6.79	6.72	6.65
PB	3	52	6.58	6.50	6.43	6.36	6.28	6.21	6.13	6.05	5.98	5.90
PB	3	62	5.82	5.74	5.66	5.58	5.50	5.42	5.33	5.25	5.17	5.08
PB	3	72	5.00	4.92	4.83	4.75	4.66	4.57	4.49	4.39	4.26	
PB	4	81	3.91	3.75	3.70	3.70	3.71	3.73	3.75	3.77	3.78	3.79
PB	4	91	3.80	3.81	3.81	3.79						
PB	5	95	3.54	3.47	3.44	3.43	3.42	3.39	3.35	3.32		
PB	6	103	3.23	3.22								
PB	9	141	3.37	3.59								
PB	13	205	3.86	3.38	3.02	2.81	2.89	2.90	2.91	2.91	2.91	2.91
PB	15	228	2.85	2.86	2.88	2.89	2.92	2.93	2.95	2.98	3.01	3.07
PB	15	238	2.91	2.91	2.91	2.92	2.92	2.93	2.91	2.91	2.97	2.99
PB	15	249	3.03	2.99	2.96	2.94	2.93	2.91	2.95	2.96	2.97	2.99
PB	16	255	2.91	2.91	2.91	2.92	2.94	2.94	2.95	3.11	3.12	3.13
PB	16	265	3.00	3.02	3.03	3.05	3.06	3.08	3.09	3.11	3.12	3.09
PB	16	275	3.14	3.15	3.16	3.17	3.17	3.17	3.16	3.14	3.12	
PB	16	285	3.04	2.98								
PB	22	390	2.93	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.91
PB	24	405	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.88	2.87	2.86
PB	24	415	2.91	2.91	2.91	2.90	2.90	2.89	2.89	2.88		
PB	24	425	2.85	2.84	2.82	2.80	2.78	2.76	2.73	2.70		
PB	25	433	2.60	2.54	2.52	2.54	2.60	2.70				
PB	26	439	2.93	3.16	3.38	3.61	3.85	4.11				
AG	7	105	1.23	1.85								
AB	8	107	3.91	4.28	4.48	4.60	4.68	4.73	4.77	4.80	4.83	4.86
AB	8	117	4.88	4.90	4.91	4.92	4.94	4.94	4.95	4.96	4.97	4.97
AB	8	127	4.97	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.97	
AB	8	137	4.96	4.96	4.67	3.39						
SG	10	143	4.66	4.56	4.48	4.43	4.10	4.11	4.12	4.12	4.13	4.13
SB	11	147	4.44	4.40	4.31	4.09	4.12	4.12	4.12	4.11	4.11	4.10
SB	11	157	4.13	4.13	4.13	4.13	4.12	4.12	4.12	4.06	4.05	4.04
SB	11	167	4.10	4.09	4.09	4.08	4.08	4.07	4.07	4.06	3.97	3.97
SB	11	177	4.04	4.03	4.02	4.01	4.01	4.00	3.99	3.98		
SB	11	187	3.96	3.95	3.94	3.94	3.96	4.05	4.36	6.33	6.35	6.32
BW	12	194	5.53	5.91	6.08	6.17	6.23	6.27	6.30			
BW	12	204	4.89									
CG	14	209	.67	.60	.68	.79	.89	1.00	1.10	1.20	1.29	1.37
CG	14	219	1.45	1.51	1.57	1.62	1.66	1.69	1.74	1.87	2.82	
BB	17	287	4.15	3.95	3.76	3.58	3.41	3.24	3.09	2.94	2.80	2.66
BB	17	297	2.53	2.41	2.29	2.18	2.08	1.98	1.88	1.79	1.70	1.62
BB	17	307	1.55	1.49	1.46	1.53	1.88					

ID	RGH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	4	91	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	5	95	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	6	103	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	9	141	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	13	205	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	15	228	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	15	238	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	15	248	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	16	255	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	16	265	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	16	275	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	16	285	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	22	390	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	24	405	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	24	415	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	24	425	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	25	433	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB	26	439	.2	.4	.5	.6	.8	.9	.1	.1	.1	.1
AG	7	105	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB	8	107	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB	8	117	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB	8	127	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB	8	137	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SG	10	143	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB	11	147	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB	11	157	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB	11	167	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB	11	177	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB	11	187	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BW	12	194	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BW	12	204	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
CG	14	209	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
CG	14	219	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	17	287	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	17	297	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	17	307	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	18	312	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	19	316	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	20	321	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	20	331	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	20	341	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	20	351	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	20	361	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	20	371	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB	21	384	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
CT	23	395	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1

INTERMEDIATE REPORT
 NIKOD
 MG/L

RAYOU PLAQUEMINE DRULE WAPERSHHD
 CALIBRATION RUN

PB	1	11	7.78	7.80	7.83	7.91	8.18	9.18	13.03	22.49	22.19	21.91
PB	2	21	21.39	20.35	19.89	19.45	19.02	18.60	18.19	17.79	17.40	17.02
PB	3	22	20.82	16.29	15.94	15.60	15.27	14.95	14.63	14.32	14.02	13.73
PB	3	32	16.65	13.17	12.90	12.63	12.38	12.12	11.88	11.64	11.41	11.18
PB	3	42	13.45	10.74	10.53	10.32	10.12	9.93	9.73	9.55	9.36	9.19
PB	3	52	10.96	8.84	8.68	8.51	8.36	8.20	8.05	7.90	7.76	7.62
PB	3	62	9.01	7.18	7.05	6.92	6.80	6.68	6.56	6.43	6.31	6.19
PB	3	72	7.18	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69
PB	4	81	6.01	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61
PB	4	91	4.64	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
PB	5	95	3.94	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16
PB	6	103	3.91	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16
PB	6	103	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87
PB	9	141	5.44	5.60	6.15	6.48	7.26	7.38	7.51	7.65	7.78	7.93
PB	13	205	5.53	5.86	7.01	7.14	8.81	9.03	9.27	9.54	9.83	10.16
PB	15	228	6.78	6.89	8.42	8.60	10.07	10.04	9.99	9.71	9.68	9.65
PB	15	238	8.08	8.24	10.12	10.10	10.07	9.78	9.44	9.36	9.32	9.28
PB	15	248	10.15	10.14	10.12	10.10	10.07	9.78	9.44	9.36	9.32	9.28
PB	16	255	9.95	9.92	9.88	9.85	9.48	9.44	9.40	9.36	9.32	9.28
PB	16	265	9.61	9.58	9.55	9.51	9.48	9.44	9.40	9.36	9.32	9.28
PB	16	275	9.24	9.19	9.14	9.09	9.03	8.96	8.90	8.82	8.74	8.64
PB	16	285	8.54	8.43	8.38	8.38	8.38	8.28	8.25	8.22	8.19	8.16
PB	22	390	8.35	8.37	8.34	8.32	8.30	8.28	8.25	8.22	8.19	8.16
PB	24	405	8.36	8.35	8.34	8.32	8.30	8.28	8.25	8.22	8.19	8.16
PB	24	415	8.13	8.09	8.05	8.00	7.95	7.90	7.84	7.78	7.71	7.64
PB	24	425	7.57	7.49	7.40	7.31	7.21	7.10	6.99	6.87		
PB	25	433	6.49	5.99	5.60	5.30	5.11	5.01				
PB	26	439	5.07	5.13	5.20	5.26	5.27	5.21				
AG	7	105	31.34	20.52	10.58	10.02	9.52	9.06	8.64	8.27	7.92	7.61
AB	8	107	11.88	11.19	6.81	6.58	6.37	6.18	6.00	5.83	5.67	5.52
AB	8	117	7.32	7.05	5.26	5.14	4.91	4.81	4.71	4.62	4.54	4.46
AB	8	127	5.39	5.26	5.14	5.02	4.91	4.81	4.71	4.62	4.54	4.46
AE	8	137	4.41	4.43	4.63	5.13	5.13	5.13	5.13	5.13	5.13	5.13
SG	10	143	1.91	1.89	1.90	1.95	1.95	1.95	1.95	1.95	1.95	1.95
SE	11	147	2.11	2.64	4.16	8.01	7.90	7.79	7.69	7.58	7.47	7.37
SE	11	157	7.27	7.17	7.07	6.97	6.87	6.78	6.69	6.59	6.50	6.41
SE	11	167	6.32	6.24	6.15	6.07	5.98	5.90	5.82	5.74	5.66	5.58
SB	11	177	5.50	5.43	5.35	5.28	5.21	5.14	5.07	5.00	4.93	4.86
SB	11	187	4.79	4.72	4.65	4.57	4.46	4.26	3.83			
SB	11	191	2.60	2.76	2.89	2.99	3.07	3.13	3.17	3.21	3.24	3.36
BW	12	204	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93
BW	12	204	54.41	48.55	43.39	38.84	34.82	31.26	28.10	25.30	22.82	20.60
CG	14	209	18.63	16.87	15.29	13.88	12.61	11.44	10.29	8.95	6.79	5.52
CG	14	219	18.63	16.87	15.29	13.88	12.61	11.44	10.29	8.95	6.79	5.52
CG	14	219	36.03	35.68	35.34	35.01	34.68	34.35	34.04	33.73	33.42	33.12
BB	17	297	32.82	32.53	32.25	31.97	31.69	31.42	31.15	30.89	30.63	30.37
BB	17	307	30.11	29.85	29.55	29.15	28.43					
BB	18	312	27.02	25.75	24.55	23.41	18.70					
BB	19	316	22.33	21.29	20.31	19.42	16.14	15.67	15.21	14.76	14.33	13.92
BB	20	321	18.20	17.66	17.14	16.63	12.02	11.67	11.34	11.01	10.70	10.40
BB	20	331	13.51	13.12	12.74	12.37	9.01	8.76	8.51	8.27	8.04	7.82
BB	20	341	10.10	9.82	9.54	9.27	6.80	6.61	6.43	6.26	6.09	5.92
BB	20	351	7.60	7.39	7.19	6.99	5.17	5.03	4.90	4.77	4.64	4.52
BB	20	361	5.76	5.61	5.46	5.31						
BB	20	371	4.39	4.25	4.05	3.97	3.98	4.00	4.04	4.10	4.19	4.33
BB	21	374	4.01	3.99	3.97	3.97	6.70	7.92				
BB	21	384	4.54	4.83	5.25	5.85						

CT 23 395 6.63 6.48 6.33 6.19 6.06 5.95 5.89 5.98 6.52 8.33

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CAPSULE SUMMARY
B. PLAIQUEMINE BRULE

DIST	FLOW	TEMP	SALIN	DO	EBOD	ORGN	NH3	CH1/A	REA/R	CBOD	CBOD	NH3	SOD
KN	CHS	DEG	C	PPT	MG/L	MG/L	MG/L	UG/L	1/DA	1/DA	1/DA	1/DA	
HIDWTR	.032	26.0	.0	.0	4.8	9.6	.0	.0	3.36	.17	.05	.00	2.92
70.00	.032	26.0	.1	4.7	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
69.80	.032	26.0	.1	4.6	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
69.60	.032	26.0	.1	4.6	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
69.40	.032	26.0	.1	4.6	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
69.20	.033	26.0	.1	4.6	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
69.00	.033	26.0	.1	4.6	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
68.80	.033	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
68.60	.034	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
68.40	.034	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
68.20	.034	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
68.00	.034	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
67.80	.034	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
67.60	.035	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
67.40	.035	26.0	.1	4.5	9.5	.0	1.0	.0	3.36	.17	.05	.00	2.92
67.20	.035	26.0	.1	4.5	9.6	.0	1.0	.0	3.36	.17	.05	.00	2.92
67.00	.035	26.0	.1	4.4	10.2	.0	1.0	.0	3.36	.17	.05	.00	2.92
66.80	.035	26.0	.1	4.1	12.7	.0	1.0	.0	3.36	.17	.05	.00	2.92
66.60	.068	26.0	.1	3.1	18.8	.0	1.0	.0	3.36	.17	.04	.00	2.92
66.40	.068	26.0	.1	3.3	18.5	.0	1.0	.0	3.36	.17	.04	.00	2.92
66.20	.069	26.0	.1	3.5	18.3	.0	1.0	.0	3.36	.17	.04	.00	2.92
66.00	.069	26.0	.1	4.5	17.8	.0	1.0220.0	.0	2.39	.17	.10	.00	3.50
65.80	.069	26.0	.1	5.3	17.3	.0	1.0216.3	.0	2.39	.17	.10	.00	3.50
65.60	.069	26.0	.1	5.8	16.9	.0	1.0212.5	.0	2.39	.17	.10	.00	3.50
65.40	.069	26.0	.1	6.3	16.5	.0	1.0208.8	.0	2.39	.17	.10	.00	3.50
65.20	.070	26.0	.1	6.9	15.7	.0	1.0201.4	.0	2.39	.17	.10	.00	3.50
65.00	.070	26.0	.1	7.1	15.3	.0	1.0197.6	.0	2.39	.17	.10	.00	3.50
64.80	.070	26.0	.1	7.2	15.0	.0	1.0193.9	.0	2.39	.17	.10	.00	3.50
64.60	.071	26.0	.1	7.3	14.6	.0	1.0190.2	.0	2.39	.17	.10	.00	3.50
64.40	.071	26.0	.1	7.4	14.3	.0	1.0186.4	.0	2.39	.17	.10	.00	3.50
64.20	.071	26.0	.1	7.5	14.0	.0	1.0182.7	.0	2.39	.17	.10	.00	3.50
64.00	.071	26.0	.1	7.5	13.7	.0	1.0179.0	.0	2.39	.17	.10	.00	3.50
63.80	.071	26.0	.1	7.5	13.4	.0	1.0175.3	.0	2.39	.17	.10	.00	3.50
63.60	.072	26.0	.1	7.5	13.1	.0	1.0171.5	.0	2.39	.17	.10	.00	3.50
63.40	.072	26.0	.1	7.5	12.8	.0	1.0167.8	.0	2.39	.17	.10	.00	3.50
63.20	.072	26.0	.1	7.5	12.5	.0	1.0164.1	.0	2.39	.17	.10	.00	3.50
63.00	.072	26.0	.1	7.4	12.3	.0	1.0160.3	.0	2.39	.17	.10	.00	3.50
62.80	.073	26.0	.1	7.4	12.0	.0	1.0156.6	.0	2.39	.17	.10	.00	3.50
62.60	.073	26.0	.1	7.4	11.8	.0	1.0152.9	.0	2.39	.17	.10	.00	3.50
62.40	.073	26.0	.1	7.3	11.6	.0	1.0149.2	.0	2.39	.17	.10	.00	3.50
62.20	.073	26.0	.1	7.3	11.3	.0	1.0145.4	.0	2.39	.17	.10	.00	3.50
62.00	.073	26.0	.1	7.2	11.1	.0	1.0141.7	.0	2.39	.17	.10	.00	3.50
61.80	.074	26.0	.1	7.2	10.9	.0	1.0138.0	.0	2.39	.17	.10	.00	3.50
61.60	.074	26.0	.1	7.1	10.7	.0	1.0134.2	.0	2.39	.17	.10	.00	3.50
61.40	.074	26.0	.1	7.0	10.5	.0	1.0130.5	.0	2.39	.17	.10	.00	3.50
61.20	.074	26.0	.1	7.0	10.3	.0	1.0126.8	.0	2.39	.17	.10	.00	3.50
61.00	.074	26.0	.1	7.0	10.3	.0	1.0126.8	.0	2.39	.17	.10	.00	3.50

60.80	.074 26.0	.1	6.9	10.1	.0	1.0223.1	2.39	.17	.10	.00	3.50
60.60	.075 26.0	.1	6.9	9.9	.0	1.0119.3	2.39	.17	.10	.00	3.50
60.40	.075 26.0	.1	6.8	9.7	.0	1.0115.6	2.39	.17	.10	.00	3.50
60.20	.075 26.0	.1	6.7	9.6	.0	1.0111.9	2.39	.17	.10	.00	3.50
60.00	.075 26.0	.1	6.6	9.4	.0	1.0108.1	2.39	.17	.10	.00	3.50
59.80	.076 26.0	.1	6.6	9.3	.0	1.0104.4	2.39	.17	.10	.00	3.50
59.60	.076 26.0	.1	6.5	9.1	.0	1.0100.7	2.39	.17	.10	.00	3.50
59.40	.076 26.0	.1	6.4	9.0	.0	1.0 96.9	2.39	.17	.10	.00	3.50
59.20	.076 26.0	.1	6.4	8.8	.0	1.0 93.2	2.39	.17	.10	.00	3.50
59.00	.076 26.0	.1	6.3	8.7	.0	1.0 89.5	2.39	.17	.10	.00	3.50
58.80	.077 26.0	.1	6.2	8.5	.0	1.0 85.8	2.39	.17	.10	.00	3.50
58.60	.077 26.0	.1	6.1	8.4	.0	1.0 82.0	2.39	.17	.10	.00	3.50
58.40	.077 26.0	.1	6.1	8.3	.0	1.0 78.3	2.39	.17	.10	.00	3.50
58.20	.077 26.0	.1	6.0	8.1	.0	1.0 74.6	2.39	.17	.10	.00	3.50
58.00	.078 26.0	.1	5.8	7.9	.0	1.0 70.8	2.39	.17	.10	.00	3.50
57.80	.078 26.0	.1	5.8	7.9	.0	1.0 67.1	2.39	.17	.10	.00	3.50
57.60	.078 26.0	.1	5.7	7.8	.0	1.0 63.4	2.39	.17	.10	.00	3.50
57.40	.078 26.0	.1	5.7	7.7	.0	1.0 59.7	2.39	.17	.10	.00	3.50
57.20	.078 26.0	.1	5.6	7.6	.0	1.0 55.9	2.39	.17	.10	.00	3.50
57.00	.079 26.0	.1	5.5	7.5	.0	1.0 52.2	2.39	.17	.10	.00	3.50
56.80	.079 26.0	.1	5.4	7.4	.0	1.0 48.5	2.39	.17	.10	.00	3.50
56.60	.079 26.0	.1	5.3	7.3	.0	1.0 44.7	2.39	.17	.10	.00	3.50
56.40	.079 26.0	.1	5.3	7.2	.0	1.0 41.0	2.39	.17	.10	.00	3.50
56.20	.080 26.0	.1	5.2	7.1	.0	1.0 37.3	2.39	.17	.10	.00	3.50
56.00	.080 26.0	.1	5.1	7.0	.0	1.0 33.6	2.39	.17	.10	.00	3.50
55.80	.080 26.0	.1	5.0	6.9	.0	1.0 29.8	2.39	.17	.10	.00	3.50
55.60	.080 26.0	.1	4.9	6.8	.0	1.0 26.1	2.39	.17	.10	.00	3.50
55.40	.080 26.0	.1	4.8	6.8	.0	1.0 22.4	2.39	.17	.10	.00	3.50
55.20	.081 26.0	.1	4.7	6.7	.0	1.0 18.6	2.39	.17	.10	.00	3.50
55.00	.081 26.0	.1	4.7	6.6	.0	1.0 14.9	2.39	.17	.10	.00	3.50
54.80	.081 26.0	.1	4.6	6.5	.0	1.0 11.2	2.39	.17	.10	.00	3.50
54.60	.082 26.0	.1	4.5	6.4	.0	1.0 7.5	2.39	.17	.10	.00	3.50
54.40	.082 26.0	.1	4.4	6.3	.0	1.0 3.7	2.39	.17	.10	.00	3.50
54.20	.100 26.0	.1	4.3	5.9	.0	1.0	2.39	.17	.10	.00	3.50
53.20	.101 26.0	.1	3.9	5.8	.0	1.0	1.08	.17	.10	.00	2.63
52.20	.102 26.0	.1	3.8	5.6	.0	1.0	1.08	.17	.10	.00	2.63
51.20	.104 26.0	.1	3.7	5.5	.0	1.0	1.08	.17	.10	.00	2.63
50.20	.105 26.0	.1	3.7	5.4	.0	1.0	1.08	.17	.10	.00	2.63
49.20	.106 26.0	.1	3.7	5.3	.0	1.0	1.08	.17	.10	.00	2.63
48.20	.107 26.0	.1	3.7	5.3	.0	1.0	1.08	.17	.10	.00	2.63
47.20	.108 26.0	.1	3.7	5.2	.0	1.0	1.08	.17	.10	.00	2.63
46.20	.109 26.0	.1	3.8	5.2	.0	1.0	1.08	.17	.10	.00	2.63
45.20	.110 26.0	.1	3.8	5.2	.0	1.0	1.08	.17	.10	.00	2.63
44.20	.111 26.0	.1	3.8	5.2	.0	1.0	1.08	.17	.10	.00	2.63
43.20	.112 26.0	.1	3.8	5.1	.0	1.0	1.08	.17	.10	.00	2.63
42.20	.113 26.0	.1	3.8	5.1	.0	1.0	1.08	.17	.10	.00	2.63
41.20	.115 26.0	.1	3.8	5.1	.0	1.0	1.08	.17	.10	.00	2.63
40.20	.145 26.0	.1	3.8	5.1	.0	1.0	1.08	.17	.10	.00	2.63
39.20	.147 26.0	.1	3.5	5.2	.0	1.0	.38	.17	.10	.00	.73
38.20	.148 26.0	.1	3.5	5.2	.0	1.0	.38	.17	.10	.00	.73
37.20	.149 26.0	.1	3.4	5.2	.0	1.0	.38	.17	.10	.00	.73
36.20	.150 26.0	.1	3.4	5.2	.0	1.0	.38	.17	.10	.00	.73
35.20	.151 26.0	.1	3.4	5.2	.0	1.0	.38	.17	.10	.00	.73
34.20	.152 26.0	.1	3.4	5.2	.0	1.0	.38	.17	.10	.00	.73
33.20	.153 26.0	.1	3.4	5.3	.0	1.0	.38	.17	.10	.00	.73

32.20	.200	26.0	.1	3.3	5.3	.0	1.0	.0	.38	.17	.10	.00	.73
31.80	.200	27.0	.1	3.2	5.4	.0	1.0	.0	.38	.18	.08	.00	.78
31.40	.200	28.0	.1	3.2	5.5	.0	1.0	.0	.38	.19	.08	.00	.83
30.85	.203	28.0	.1	3.4	5.5	.0	1.0	.0	.45	.17	.08	.00	.83
30.30	.203	28.0	.1	3.6	5.4	.0	1.0	.0	.45	.17	.08	.00	.83
29.50	.416	28.5	.1	3.9	5.2	.0	1.0	.0	.34	.18	.08	.00	.85
28.70	.416	29.0	.1	3.4	5.3	.0	1.0	.0	.34	.18	.08	.00	.88
27.90	.416	29.5	.1	3.0	5.4	.0	1.0	.0	.35	.19	.08	.00	.94
27.10	.416	30.0	.1	2.8	5.4	.0	1.0	.0	.31	.19	.05	.00	.00
26.90	.418	30.0	.1	2.8	5.3	.0	1.0	.0	.31	.19	.05	.00	.00
26.70	.418	30.0	.1	2.9	5.3	.0	1.0	.0	.31	.19	.05	.00	.00
26.50	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
26.30	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
26.10	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
25.90	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
25.70	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
25.50	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
25.30	.418	30.0	.1	2.9	5.1	.0	1.0	.0	.31	.19	.05	.00	.00
25.10	.418	30.0	.1	2.9	5.1	.0	1.0	.0	.31	.19	.05	.00	.00
24.90	.418	30.0	.1	2.9	5.1	.0	1.0	.0	.31	.19	.05	.00	.00
24.70	.418	30.0	.1	2.9	5.1	.0	1.0	.0	.31	.19	.05	.00	.00
24.50	.418	30.0	.1	2.9	5.1	.0	1.0	.0	.31	.19	.05	.00	.00
24.30	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
24.10	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
23.90	.418	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
23.70	.418	30.0	.1	3.0	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
23.50	.418	30.0	.1	3.0	5.3	.0	1.0	.0	.31	.19	.05	.00	.00
23.30	.418	30.0	.1	3.0	5.3	.0	1.0	.0	.31	.19	.05	.00	.00
23.10	.500	30.0	.1	3.1	5.4	.0	1.0	.0	.31	.19	.05	.00	.00
22.90	.500	30.0	.1	3.0	5.3	.0	1.0	.0	.31	.19	.05	.00	.00
22.70	.500	30.0	.1	3.0	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
22.50	.500	30.0	.1	3.0	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
22.30	.500	30.0	.1	2.9	5.2	.0	1.0	.0	.31	.19	.05	.00	.00
22.10	.500	30.0	.1	2.9	5.1	.0	1.0	.0	.31	.19	.05	.00	.00
21.90	.500	30.0	.1	2.9	5.0	.0	1.0	.0	.31	.19	.05	.00	.00
21.70	.500	30.0	.1	2.9	4.9	.0	1.0	.0	.31	.19	.05	.00	.00
21.50	.500	30.0	.1	2.9	4.9	.0	1.0	.0	.31	.19	.05	.00	.00
21.30	.500	30.0	.1	2.9	4.8	.0	1.0	.0	.31	.19	.05	.00	.00
21.10	.500	30.0	.1	2.9	4.7	.0	1.0	.0	.31	.19	.05	.00	.00
20.90	.500	30.0	.1	2.9	4.7	.0	1.0	.0	.31	.19	.05	.00	.00
20.70	.500	30.0	.1	2.9	4.6	.0	1.0	.0	.31	.19	.05	.00	.00
20.50	.500	30.0	.1	2.9	4.6	.0	1.0	.0	.31	.19	.05	.00	.00
20.30	.500	30.0	.1	2.9	4.5	.0	1.0	.0	.31	.19	.05	.00	.00
20.10	.500	30.0	.1	3.0	4.5	.0	1.0	.0	.31	.19	.05	.00	.00
19.90	.500	30.0	.1	3.0	4.5	.0	1.0	.0	.31	.19	.05	.00	.00
19.70	.500	30.0	.1	3.0	4.4	.0	1.0	.0	.31	.19	.05	.00	.00
19.50	.500	30.0	.1	3.0	4.4	.0	1.0	.0	.31	.19	.05	.00	.00
19.30	.500	30.0	.1	3.0	4.3	.0	1.0	.0	.31	.19	.05	.00	.00
19.10	.500	30.0	.1	3.0	4.3	.0	1.0	.0	.31	.19	.05	.00	.00
18.90	.500	30.0	.1	3.0	4.3	.0	1.0	.0	.31	.19	.05	.00	.00
18.70	.500	30.0	.1	3.1	4.3	.0	1.0	.0	.31	.19	.05	.00	.00
18.50	.500	30.0	.1	3.1	4.3	.0	1.0	.0	.31	.19	.05	.00	.00
18.30	.500	30.0	.1	3.1	4.2	.0	1.0	.0	.31	.19	.05	.00	.00
18.10	.500	30.0	.1	3.1	4.2	.0	1.0	.0	.31	.19	.05	.00	.00
17.90	.500	30.0	.1	3.1	4.2	.0	1.0	.0	.31	.19	.05	.00	.00

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 CASSELL: SUMMARY
 ATMWOOD GULLY

DIST	FLOW	TEMP	SALIN	DO	EROD	ORGN	HHS	CHL	REAR	CBOD	CBOD	HHS	SOD
KM	CMG	DEG C	PPT	MG/L	MG/L	MG/L	UG/L	UG/L	RATE	DFCA	SHFT	DFCA	
									1/DA	1/DA	1/DA	1/DA	
2.00	.671	24.0	.6	3.6	5.0	.0	.3	.0	.21	.14	.05	.00	.00
1.00	.671	22.5	.8	3.8	5.3	.0	.2	.0	.20	.13	.05	.00	.00
.00	.671	21.1	.9	4.1	5.6	.0	.0	.0	.19	.13	.05	.00	.00
3.50	.001	26.0	.1	1.2	26.3	.0	1.0	.0	3.61	.11	.25	.00	3.50
3.40	.001	26.0	.1	1.9	16.6	.0	1.0	.0	3.61	.16	.25	.00	3.50
3.30	.002	26.1	.1	3.9	12.7	.0	1.0	.0	3.67	.17	.14	.00	1.76
3.20	.002	26.1	.1	4.3	11.9	.0	1.0	.0	3.67	.17	.14	.00	1.76
3.10	.002	26.2	.1	4.5	11.2	.0	1.0	.0	3.68	.17	.14	.00	1.77
3.00	.002	26.2	.1	4.6	10.6	.0	1.0	.0	3.68	.17	.14	.00	1.78
2.90	.002	26.3	.1	4.7	10.0	.0	1.0	.0	3.68	.17	.14	.00	1.78
2.80	.002	26.4	.1	4.7	9.5	.0	1.0	.0	3.69	.17	.14	.00	1.79
2.70	.002	26.4	.1	4.8	9.1	.0	1.0	.0	3.69	.17	.13	.00	1.80
2.60	.002	26.5	.1	4.8	8.7	.0	1.0	.0	3.70	.17	.13	.00	1.80
2.50	.002	26.5	.1	4.8	8.4	.0	1.0	.0	3.70	.18	.13	.00	1.81
2.40	.002	26.5	.1	4.9	8.1	.0	1.0	.0	3.71	.18	.13	.00	1.82
2.30	.002	26.6	.1	4.9	7.8	.0	1.0	.0	3.71	.18	.13	.00	1.83
2.20	.002	26.7	.1	4.9	7.5	.0	1.0	.0	3.72	.18	.13	.00	1.84
2.10	.002	26.8	.1	4.9	7.1	.0	1.0	.0	3.72	.18	.13	.00	1.84
2.00	.002	26.8	.1	4.9	6.9	.0	1.0	.0	3.72	.18	.13	.00	1.85
1.90	.002	26.9	.1	4.9	6.7	.0	1.0	.0	3.73	.18	.13	.00	1.86
1.80	.002	26.9	.1	4.9	6.6	.0	1.0	.0	3.73	.18	.13	.00	1.86
1.70	.002	27.0	.1	5.0	6.4	.0	1.0	.0	3.73	.18	.13	.00	1.87
1.60	.002	27.1	.1	5.0	6.1	.0	1.0	.0	3.74	.18	.13	.00	1.88
1.50	.002	27.1	.1	5.0	6.1	.0	1.0	.0	3.74	.18	.13	.00	1.89
1.40	.003	27.2	.1	5.0	6.1	.0	1.0	.0	3.75	.18	.13	.00	1.89
1.30	.003	27.2	.1	5.0	6.0	.0	1.0	.0	3.75	.18	.13	.00	1.89
1.20	.003	27.3	.1	5.0	5.9	.0	1.0	.0	3.75	.18	.13	.00	1.90
1.10	.003	27.4	.1	5.0	5.8	.0	1.0	.0	3.76	.18	.13	.00	1.91
1.00	.003	27.4	.1	5.0	5.7	.0	1.0	.0	3.76	.18	.13	.00	1.91
.90	.003	27.5	.1	5.0	5.6	.0	1.0	.0	3.76	.18	.13	.00	1.92
.80	.003	27.5	.1	5.0	5.5	.0	1.0	.0	3.77	.18	.13	.00	1.93
.70	.003	27.6	.1	5.0	5.4	.0	1.0	.0	3.77	.18	.13	.00	1.94
.60	.003	27.6	.1	5.0	5.3	.0	1.0	.0	3.77	.18	.13	.00	1.94
.50	.003	27.7	.1	5.0	5.3	.0	1.0	.0	3.78	.19	.13	.00	1.95
.40	.003	27.8	.1	5.0	5.2	.0	1.0	.0	3.79	.19	.13	.00	1.96
.30	.003	27.8	.1	5.0	5.1	.0	1.0	.0	3.79	.19	.13	.00	1.96
.20	.003	27.9	.1	4.9	5.1	.0	1.0	.0	3.79	.19	.13	.00	1.97
.10	.003	27.9	.1	4.7	5.2	.0	1.0	.0	3.79	.19	.13	.00	1.98
.00	.003	28.0	.1	3.4	5.5	.0	1.0	.0	3.80	.19	.13	.00	1.99

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 CARBULE SUMMARY
 SILLS GULLY

DIST	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD MG/L	ORGI MG/L	NH3 MG/L	CHLA UG/L	REAFR			SOD	
									CBO1	CBO2	NH3		
									1/DA	1/DA	1/DA		
HIDWTR	.015	.0	.0	4.8	9.5	.0	.0	.0	4.17	.17	.25	.00	3.50
16.00	.016	26.0	.1	4.7	9.2	.0	1.0	.0	4.17	.17	.25	.00	3.50
15.90	.016	26.0	.1	4.6	8.9	.0	1.0	.0	4.17	.17	.25	.00	3.50
15.80	.016	26.0	.1	4.5	8.7	.0	1.0	.0	4.17	.17	.25	.00	3.50
15.70	.016	26.0	.1	4.4	8.5	.0	1.0	.0	4.17	.17	.25	.00	3.50
15.60	.019	26.1	.1	4.4	8.4	.0	1.0	.0	4.43	.17	.26	.00	3.51
15.50	.019	26.1	.1	4.4	8.2	.0	1.0	.0	4.43	.17	.26	.00	3.53
15.40	.019	26.2	.1	4.3	8.1	.0	1.0	.0	4.44	.17	.26	.00	3.54
15.30	.022	26.2	.1	4.1	8.3	.0	1.0	.0	4.44	.17	.26	.00	3.55
15.20	.022	26.3	.1	4.1	8.1	.0	1.0	.0	4.45	.17	.26	.00	3.56
15.10	.022	26.3	.1	4.1	7.9	.0	1.0	.0	4.45	.17	.26	.00	3.57
15.00	.022	26.4	.1	4.1	7.5	.0	1.0	.0	4.46	.17	.26	.00	3.59
14.90	.022	26.5	.1	4.1	7.4	.0	1.0	.0	4.46	.18	.26	.00	3.61
14.80	.022	26.5	.1	4.1	7.2	.0	1.0	.0	4.47	.18	.26	.00	3.62
14.70	.023	26.5	.1	4.1	7.0	.0	1.0	.0	4.47	.18	.26	.00	3.63
14.60	.023	26.6	.1	4.1	6.9	.0	1.0	.0	4.47	.18	.26	.00	3.65
14.50	.023	26.6	.1	4.1	6.9	.0	1.0	.0	4.48	.18	.25	.00	3.66
14.40	.023	26.7	.1	4.1	6.7	.0	1.0	.0	4.48	.18	.25	.00	3.66
14.30	.023	26.7	.1	4.1	6.6	.0	1.0	.0	4.49	.18	.25	.00	3.67
14.20	.023	26.8	.1	4.1	6.4	.0	1.0	.0	4.49	.18	.25	.00	3.68
14.10	.023	26.9	.1	4.1	6.3	.0	1.0	.0	4.49	.18	.25	.00	3.69
14.00	.023	26.9	.1	4.1	6.1	.0	1.0	.0	4.50	.18	.25	.00	3.71
13.90	.023	27.0	.1	4.1	6.0	.0	1.0	.0	4.50	.18	.25	.00	3.72
13.80	.023	27.0	.1	4.1	5.9	.0	1.0	.0	4.51	.18	.25	.00	3.73
13.70	.023	27.1	.1	4.1	5.7	.0	1.0	.0	4.51	.18	.25	.00	3.74
13.60	.023	27.1	.1	4.1	5.6	.0	1.0	.0	4.52	.18	.25	.00	3.76
13.50	.023	27.2	.1	4.1	5.5	.0	1.0	.0	4.52	.18	.25	.00	3.77
13.40	.023	27.2	.1	4.1	5.4	.0	1.0	.0	4.52	.18	.25	.00	3.78
13.30	.023	27.3	.1	4.1	5.2	.0	1.0	.0	4.53	.18	.25	.00	3.80
13.20	.023	27.3	.1	4.1	5.1	.0	1.0	.0	4.53	.18	.25	.00	3.81
13.10	.023	27.4	.1	4.1	4.9	.0	1.0	.0	4.54	.18	.25	.00	3.82
13.00	.023	27.4	.1	4.1	4.8	.0	1.0	.0	4.54	.18	.25	.00	3.83
12.90	.023	27.5	.1	4.1	4.8	.0	1.0	.0	4.55	.18	.25	.00	3.85
12.80	.023	27.5	.1	4.0	4.7	.0	1.0	.0	4.55	.18	.25	.00	3.86
12.70	.024	27.6	.1	4.0	4.6	.0	1.0	.0	4.56	.18	.25	.00	3.87
12.60	.024	27.6	.1	4.0	4.5	.0	1.0	.0	4.56	.18	.25	.00	3.89
12.50	.024	27.7	.1	4.0	4.4	.0	1.0	.0	4.57	.19	.25	.00	3.91
12.40	.024	27.8	.1	4.0	4.3	.0	1.0	.0	4.57	.19	.25	.00	3.92
12.30	.024	27.8	.1	4.0	4.2	.0	1.0	.0	4.58	.19	.25	.00	3.94
12.20	.024	27.9	.1	4.0	4.1	.0	1.0	.0	4.58	.19	.25	.00	3.95
12.10	.024	27.9	.1	4.0	4.0	.0	1.0	.0	4.59	.19	.25	.00	3.96
12.00	.024	28.0	.1	4.0	3.9	.0	1.0	.0	4.59	.19	.25	.00	3.96

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CAPSULE SUMMARY
CROWLEY HIGH GULLY

DIST	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	CHLA UG/L	REAER CBOD RATE 1/DA	CBOD SETT 1/DA	NH3 DECA 1/DA	SOD	
11.90	.024	28.0	.1	4.0	3.9	.0	1.0	.0	4.59	.19	.25	.00	3.98
11.80	.024	28.1	.1	4.0	3.8	.0	1.0	.0	4.59	.19	.25	.00	3.99
11.70	.024	28.1	.1	4.0	3.7	.0	1.0	.0	4.60	.19	.25	.00	4.00
11.60	.024	28.2	.1	4.0	3.6	.0	1.0	.0	4.60	.19	.25	.00	4.02
11.50	.024	28.2	.1	3.9	3.5	.0	1.0	.0	4.61	.19	.25	.00	4.03
11.40	.024	28.3	.1	3.9	3.5	.0	1.0	.0	4.61	.19	.25	.00	4.04
11.30	.024	28.3	.1	3.9	3.4	.0	1.0	.0	4.62	.19	.25	.00	4.06
11.20	.024	28.4	.1	4.0	3.5	.0	1.0	.0	4.62	.19	.25	.00	4.07
11.10	.024	28.4	.1	4.0	3.7	.0	1.0	.0	4.62	.19	.25	.00	4.09
11.00	.024	28.5	.1	4.4	4.5	.0	1.0	.0	4.63	.19	.25	.00	4.10
10.00	.113	28.5	.1	5.5	7.1	.0	1.0	.0	5.77	.19	.14	.00	2.04
9.00	.123	28.4	.1	5.9	6.4	.0	1.0	.0	5.77	.19	.14	.00	2.04
8.00	.133	28.4	.1	6.1	5.9	.0	1.0	.0	5.76	.19	.13	.00	2.03
7.00	.143	28.3	.1	6.2	5.4	.0	1.0	.0	5.76	.19	.13	.00	2.03
6.00	.153	28.3	.1	6.2	5.0	.0	1.0	.0	5.75	.19	.13	.00	2.02
5.00	.163	28.2	.1	6.3	4.7	.0	1.0	.0	5.75	.19	.13	.00	2.01
4.00	.173	28.2	.1	6.3	4.4	.0	1.0	.0	5.74	.19	.13	.00	2.01
3.00	.183	28.1	.1	6.3	4.2	.0	1.0	.0	5.74	.19	.13	.00	2.00
2.00	.193	28.1	.1	6.4	4.0	.0	1.0	.0	5.74	.19	.13	.00	2.00
1.00	.203	28.0	.1	6.3	3.8	.0	1.0	.0	5.73	.19	.13	.00	1.99
.00	.213	28.0	.1	4.9	4.8	.0	1.0	.0	5.73	.19	.13	.00	1.99

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CAPSULE SUMMARY
BAYOU BLANC

DIST	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	CHLA UG/L	REAER CBOD RATE 1/DA	CBOD SETT 1/DA	NH3 DECA 1/DA	SOD	
HDWTR	.000	.0	.0	4.9	4.6	.0	.0	.0	3.70	.07	.26	.00	4.12
1.80	.001	28.6	.1	.7	57.1	.0	1.0	.0	3.70	.06	.26	.00	4.14
1.70	.001	28.7	.1	.6	47.2	.0	1.0	.0	3.71	.07	.26	.00	4.16
1.60	.001	28.7	.1	.7	39.1	.0	1.0	.0	3.71	.08	.26	.00	4.18
1.50	.001	28.8	.1	.8	32.4	.0	1.0	.0	3.71	.08	.26	.00	4.20
1.40	.001	28.9	.1	.9	27.0	.0	1.0	.0	3.72	.09	.26	.00	4.22
1.30	.001	29.0	.1	1.0	22.5	.0	1.0	.0	3.72	.10	.26	.00	4.24
1.20	.001	29.1	.1	1.1	18.8	.0	1.0	.0	3.73	.11	.26	.00	4.27
1.10	.001	29.1	.1	1.2	15.8	.0	1.0	.0	3.73	.12	.26	.00	4.29
1.00	.001	29.2	.1	1.3	13.3	.0	1.0	.0	3.74	.13	.26	.00	4.31
.90	.001	29.3	.1	1.4	11.3	.0	1.0	.0	3.74	.14	.25	.00	4.33
.80	.001	29.4	.1	1.4	9.7	.0	1.0	.0	3.75	.15	.25	.00	4.35
.70	.001	29.4	.1	1.5	8.4	.0	1.0	.0	3.75	.15	.25	.00	4.37
.60	.001	29.5	.1	1.6	7.4	.0	1.0	.0	3.76	.16	.25	.00	4.39
.50	.001	29.6	.1	1.6	6.5	.0	1.0	.0	3.76	.17	.25	.00	4.42
.40	.002	29.7	.1	1.7	5.9	.0	1.0	.0	3.77	.17	.25	.00	4.44
.30	.002	29.8	.1	1.7	5.3	.0	1.0	.0	3.77	.17	.25	.00	4.46
.20	.002	29.8	.1	1.7	4.9	.0	1.0	.0	3.78	.18	.25	.00	4.48
.10	.002	29.9	.1	1.9	4.8	.0	1.0	.0	3.78	.19	.25	.00	4.48
.00	.002	30.0	.1	2.8	5.3	.0	1.0	.0	3.79	.21	.25	.00	4.51

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CAPSULE SUMMARY
BAYOU BLANC

DIST FLOW TEMP SALIN DO EBOD ORGN NH3 CHLA REAER CBOD RATE 1/DA CBOD SETT 1/DA NH3 DECA 1/DA SOD

KM	CHMS DEG C	PPT MG/L	MG/L	MG/L	MG/L	UG/L	1/DA	1/DA	1/DA	1/DA			
HDMTR	.018	.0	5.3	13.7	.0	.0	3.64	.07	.26	.00	5.14		
25.60	.075	28.5	.1	4.2	24.4	.0	1.0	.0	3.64	.07	.26	.00	5.15
25.50	.076	28.6	.1	4.0	24.1	.0	1.0	.0	3.64	.07	.26	.00	5.16
25.40	.077	28.6	.1	3.8	23.9	.0	1.0	.0	3.64	.07	.26	.00	5.18
25.30	.078	28.7	.1	3.6	23.6	.0	1.0	.0	3.65	.07	.26	.00	5.19
25.20	.078	28.7	.1	3.4	23.4	.0	1.0	.0	3.65	.07	.26	.00	5.20
25.10	.079	28.7	.1	3.2	23.1	.0	1.0	.0	3.65	.07	.26	.00	5.21
25.00	.080	28.8	.1	3.1	22.9	.0	1.0	.0	3.65	.07	.26	.00	5.23
24.90	.081	28.8	.1	2.9	22.6	.0	1.0	.0	3.66	.08	.26	.00	5.24
24.80	.081	28.9	.1	2.8	22.4	.0	1.0	.0	3.66	.08	.26	.00	5.25
24.70	.082	28.9	.1	2.7	22.2	.0	1.0	.0	3.66	.08	.26	.00	5.27
24.60	.082	28.9	.1	2.5	21.9	.0	1.0	.0	3.66	.08	.26	.00	5.28
24.50	.083	29.0	.1	2.4	21.7	.0	1.0	.0	3.67	.08	.26	.00	5.29
24.40	.084	29.0	.1	2.3	21.5	.0	1.0	.0	3.67	.08	.26	.00	5.31
24.30	.085	29.1	.1	2.2	21.3	.0	1.0	.0	3.67	.08	.26	.00	5.32
24.20	.085	29.1	.1	2.1	21.1	.0	1.0	.0	3.67	.08	.26	.00	5.33
24.10	.086	29.1	.1	2.0	20.9	.0	1.0	.0	3.67	.08	.26	.00	5.35
24.00	.087	29.2	.1	1.9	20.7	.0	1.0	.0	3.68	.07	.26	.00	5.36
23.90	.087	29.2	.1	1.8	20.5	.0	1.0	.0	3.68	.07	.26	.00	5.38
23.80	.088	29.3	.1	1.7	20.3	.0	1.0	.0	3.68	.07	.26	.00	5.39
23.70	.089	29.3	.1	1.6	20.1	.0	1.0	.0	3.68	.06	.26	.00	5.40
23.60	.089	29.3	.1	1.5	19.9	.0	1.0	.0	3.69	.06	.26	.00	5.42
23.50	.090	29.4	.1	1.5	19.7	.0	1.0	.0	3.69	.06	.26	.00	5.43
23.40	.091	29.4	.1	1.5	19.5	.0	1.0	.0	3.69	.06	.26	.00	5.44
23.30	.092	29.5	.1	1.5	19.2	.0	1.0	.0	3.69	.06	.26	.00	5.46
23.20	.092	29.5	.1	1.9	18.7	.0	1.0	.0	3.70	.07	.26	.00	5.46
23.10	.093	29.5	.1	2.9	17.8	.0	1.0	.0	3.10	.14	.16	.00	1.82
23.00	.094	29.5	.1	4.2	16.9	.0	1.0	.0	3.10	.14	.16	.00	1.82
22.90	.095	29.5	.1	5.6	16.1	.0	1.0	.0	3.13	.14	.16	.00	1.86
22.80	.096	29.5	.1	7.0	15.4	.0	1.0	.0	3.13	.14	.16	.00	1.86
22.70	.097	29.9	.1	7.6	14.7	.0	1.0	.0	3.15	.14	.16	.00	1.91
22.60	.098	30.3	.1	7.6	14.0	.0	1.0	.0	3.17	.15	.16	.00	1.95
22.50	.099	30.6	.1	7.3	13.4	.0	1.0	.0	3.19	.15	.16	.00	2.00
22.40	.099	31.0	.1	6.7	12.5	.0	1.0	.0	3.22	.15	.16	.00	2.05
22.30	.100	31.4	.1	5.8	12.4	.0	1.0	.0	2.94	.10	.00	.00	2.05
22.00	.100	31.4	.1	5.6	12.4	.0	1.0	.0	2.94	.10	.00	.00	2.05
21.70	.100	31.3	.1	5.4	12.3	.0	1.0	.0	2.94	.10	.00	.00	2.04
21.40	.101	31.3	.1	5.4	12.1	.0	1.0	.0	2.94	.10	.00	.00	2.04
21.10	.101	31.3	.1	5.3	12.0	.0	1.0	.0	2.94	.10	.00	.00	2.04
21.00	.101	31.3	.1	5.2	11.9	.0	1.0	.0	2.94	.10	.00	.00	2.03
20.80	.101	31.3	.1	5.1	11.8	.0	1.0	.0	2.94	.10	.00	.00	2.03
20.50	.101	31.2	.1	5.1	11.8	.0	1.0	.0	2.94	.10	.00	.00	2.03
20.20	.101	31.2	.1	5.1	11.6	.0	1.0	.0	2.93	.10	.00	.00	2.02
19.90	.101	31.2	.1	5.1	11.4	.0	1.0	.0	2.93	.10	.00	.00	2.02
19.60	.101	31.2	.1	5.1	11.4	.0	1.0	.0	2.93	.10	.00	.00	2.02
19.30	.101	31.1	.1	5.1	11.3	.0	1.0	.0	2.93	.10	.00	.00	2.01
19.00	.101	31.1	.1	5.1	11.2	.0	1.0	.0	2.93	.10	.00	.00	2.01
18.70	.101	31.1	.1	5.1	11.1	.0	1.0	.0	2.93	.10	.00	.00	2.01
18.40	.101	31.1	.1	5.1	11.0	.0	1.0	.0	2.93	.10	.00	.00	2.01
18.10	.101	31.0	.1	5.1	10.9	.0	1.0	.0	2.92	.10	.00	.00	2.00
17.80	.101	31.0	.1	5.1	10.8	.0	1.0	.0	2.92	.10	.00	.00	2.00
17.50	.101	31.0	.1	5.1	10.7	.0	1.0	.0	2.92	.10	.00	.00	2.00
17.20	.101	31.0	.1	5.2	10.6	.0	1.0	.0	2.92	.10	.00	.00	1.99
16.90	.102	30.9	.1	5.2	10.5	.0	1.0	.0	2.92	.10	.00	.00	1.99

1
 0 CAPSULE SUMMARY
 0
 0 N. COULEUR TRIEF
 0
 0
 0

REAER CHOD CHOD NH3													
DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	CHLA MG/L	RAVE 1/DA	DECA 1/DA	SOD 1/DA		
HDWTR	.009	.0	4.8	9.5	.0	.0	.0	.0	4.45	.19	.25	.00	4.14
.90	.013	28.6	.1	3.3	9.1	.0	1.0	.0	4.46	.19	.25	.00	4.18
.80	.013	28.8	.1	3.2	8.8	.0	1.0	.0	4.48	.20	.25	.00	4.22
.70	.013	29.0	.1	3.1	8.5	.0	1.0	.0	4.49	.20	.25	.00	4.26
.60	.013	29.1	.1	3.0	8.2	.0	1.0	.0	4.50	.20	.25	.00	4.30
.50	.013	29.3	.1	3.0	7.9	.0	1.0	.0	4.51	.20	.25	.00	4.34
.40	.013	29.4	.1	2.9	7.6	.0	1.0	.0	4.52	.20	.25	.00	4.38
.30	.013	29.5	.1	2.9	7.2	.0	1.0	.0	4.54	.20	.25	.00	4.42
.20	.013	29.7	.1	2.9	6.7	.0	1.0	.0	4.55	.20	.25	.00	4.46
.10	.013	29.9	.1	2.9	5.8	.0	1.0	.0	4.56	.21	.25	.00	4.51
.00	.013	30.0	.1	2.9	3.6	.0	1.0	.0					

1 FTHAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 1 FREE FLOWING W/CHURCH POINT
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

REACH INPUTS																
ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-T	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NH3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
1	HDWTR	.0316	.00	.00	.0	.0	4.80	9.65	9.65	.00	.00	.00	.00	.0	0.	7.52
EACH	IHCN	.0002	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.00	0.	6.80
18	WSTLD	.0326	.00	.00	.0	.0	.90	30.00	30.00	.00	.00	.00	.00	.0	0.	39.40

HYDRAULIC PARAMETER VALUES															
ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
1	70.20	70.00	.0318	.0	.020	.12	.31	5.2	322.	1031.2	1.6	0.	.000	1.389	.020
2	70.00	69.80	.0320	.0	.020	.12	.31	5.2	323.	1034.6	1.6	0.	.000	1.394	.020
3	69.80	69.60	.0323	.0	.020	.12	.31	5.2	325.	1037.9	1.6	0.	.000	1.399	.020
4	69.60	69.40	.0325	.0	.020	.12	.31	5.2	326.	1041.3	1.6	0.	.000	1.403	.020
5	69.40	69.20	.0327	.0	.020	.12	.31	5.2	327.	1044.6	1.6	0.	.000	1.408	.020
6	69.20	69.00	.0329	.0	.020	.12	.31	5.2	329.	1047.9	1.6	0.	.000	1.413	.020
7	69.00	68.80	.0331	.0	.020	.12	.31	5.3	330.	1051.2	1.7	0.	.000	1.418	.020
8	68.80	68.60	.0334	.0	.020	.12	.31	5.3	332.	1054.5	1.7	0.	.000	1.422	.020
9	68.60	68.40	.0336	.0	.020	.11	.32	5.3	333.	1057.8	1.7	0.	.000	1.427	.020
10	68.40	68.20	.0338	.0	.020	.11	.32	5.3	335.	1061.0	1.7	0.	.000	1.431	.020

ELEM NO.	ENDING DIST	SAV D.O. MG/L	RKAER RATE 1/DA	CBOD DI/CAY 1/DA	CBOD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOD *	CORR SOD +	ORGN DECAT 1/DA	ORGN SETT 1/DA	NH3 DECAT 1/DA	NH3 SRCE *	DENIT RATE 1/DA	FO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCH DECAT 1/DA	NCH SETT 1/DA	
11	68.20	68.00	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
12	68.00	67.80	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
13	67.80	67.60	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
14	67.60	67.40	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
15	67.40	67.20	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
16	67.20	67.00	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
17	67.00	66.80	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
18	66.80	66.60	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
19	66.60	66.40	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
20	66.40	66.20	3.36	.17	.05	.00	2.92	2.92	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	
TOT							2.22						7262.							
AVG							2.22						22379.2							
CUM								.32	5.6					1.8						

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

20 DEG C RATE	AVG 20 DEG C RATE	** MG/L/DAY	CM-I	CM-II	DO MG/L	ROD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLT #/100ML	NCH *	
3.00	3.00	.13	.05	.00	4.70	9.63	9.63	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.56	
																	.05

***** WATER QUALITY CONSTITUENT VALUES *****

ELFM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	ROD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLT #/100ML	NCH *
1	70.000	26.00	.1	.0	.0	4.70	9.63	9.63	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.56

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECAY	CBOD SETT	ANBOD DECAY	FUJL SOD	CORR SOD	ORGN DECAY	ORGN SETT	NH3 DECAY	NH3 SRCE	DENT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAY	NCH DECAY	NCM SETT	
21	66.000	8.11	2.39	.17	.10	.00	3.50	3.50	.06	.00	.00	.00	.00	.00	.00	14.49	.00	.00	.15	.04
AVG 20 DFG C RATE			2.13	.13	.10	.00	2.40	.00	.00	.00	.00	.00	.00	.00	.00		.00	.00	7.59	.10
* G/SQ H/D			** MG/L/DAY																	

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CH-I	CH-II	DO	BOD	EBOD	ORGN	NH3	NO3+2	TOTN	PHOS	CHL A	MACRO	COLI	NCH	NCM	
21	66.000	26.00	.1	.0	.0	4.46	17.81	17.81	.00	1.00	1.00	2.00	1.00	220.0	.0	0.	0.	21.39	
* CH-I - CHLORIDES																			
** G/CU M																			
* CH-I = SULFATES																			
** G/CU M																			
* CH-I = NHOD																			
** G/CU M																			

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 3 POOLED REACH TO HAZELWOOD GULLIY
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	FLOW TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CH-I	CH-II	DO	BOD	EBOD	ORGN	NH3	NO3+2	PHOS	CHL A	COLI	NCH	NCM
22	UPR RCH	.0688	26.00	.14	.0	.0	4.46	17.81	17.81	.00	1.00	1.00	2.00	1.00	220.0	.0	21.39
EACH INCR		.0002	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.00	.00	.0	6.80
80	WSTLD	.0185	.00	.00	.0	.0	4.90	4.60	4.60	.00	.00	.00	.00	.00	.00	.0	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BRGIN DIST	ENDING DIST	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
22	66.00	65.80	.0690	47.2	.021	.11	.44	7.4	649.	1475.8	3.2	40.	.000	1.900	.021
23	65.80	65.60	.0692	47.1	.021	.11	.44	7.4	649.	1475.8	3.2	61.	.000	1.900	.021
24	65.60	65.40	.0694	46.9	.021	.11	.44	7.4	649.	1475.8	3.2	81.	.001	1.900	.021
25	65.40	65.20	.0696	46.8	.021	.11	.44	7.4	649.	1475.8	3.2	101.	.001	1.900	.021
26	65.20	65.00	.0699	46.6	.022	.11	.44	7.4	649.	1475.8	3.2	121.	.001	1.900	.022
27	65.00	64.80	.0701	46.5	.022	.11	.44	7.4	649.	1475.8	3.2	141.	.001	1.900	.022
28	64.80	64.60	.0703	46.3	.022	.11	.44	7.4	649.	1475.8	3.2	162.	.001	1.900	.022
29	64.60	64.40	.0705	46.2	.022	.11	.44	7.4	649.	1475.8	3.2	182.	.001	1.900	.022
30	64.40	64.20	.0707	46.0	.022	.11	.44	7.4	649.	1475.8	3.2	202.	.001	1.900	.022
31	64.20	64.00	.0710	45.9	.022	.11	.44	7.4	649.	1475.8	3.2	222.	.002	1.900	.022

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	RFAER RATE 1/DA	CBOD DEFCAY 1/DA	CBOD SETT 1/DA	AMBOD DEFCAY 1/DA	FULL SOD *	CORR SOD *	ORGN DEFCAY 1/DA	ORGN SETT 1/DA	NH3 DEFCAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DEFCAY 1/DA	NCM DEFCAY 1/DA	NCM SETT 1/DA
22	65.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	14.24	.00	.00	.15	.04
23	65.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	14.00	.00	.00	.15	.04
24	65.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	13.75	.00	.00	.15	.04
25	65.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	13.51	.00	.00	.15	.04
26	65.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	13.26	.00	.00	.15	.04
27	64.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	13.02	.00	.00	.15	.04
28	64.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	12.77	.00	.00	.15	.04
29	64.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	12.53	.00	.00	.15	.04
30	64.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	12.28	.00	.00	.15	.04
31	64.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	12.03	.00	.00	.15	.04
32	63.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	11.79	.00	.00	.15	.04
33	63.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	11.54	.00	.00	.15	.04
34	63.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	11.30	.00	.00	.15	.04
35	63.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	11.05	.00	.00	.15	.04
36	63.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	10.81	.00	.00	.15	.04
37	62.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	10.56	.00	.00	.15	.04
38	62.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	10.32	.00	.00	.15	.04
39	62.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	10.07	.00	.00	.15	.04
40	62.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	9.82	.00	.00	.15	.04
41	62.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	9.58	.00	.00	.15	.04
42	61.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	9.33	.00	.00	.15	.04
43	61.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	9.09	.00	.00	.15	.04
44	61.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	8.84	.00	.00	.15	.04
45	61.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	8.60	.00	.00	.15	.04
46	61.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	8.35	.00	.00	.15	.04
47	60.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	8.10	.00	.00	.15	.04
48	60.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	7.86	.00	.00	.15	.04
49	60.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	7.61	.00	.00	.15	.04
50	60.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	7.37	.00	.00	.15	.04
51	60.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	7.12	.00	.00	.15	.04
52	59.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	6.88	.00	.00	.15	.04
53	59.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	6.63	.00	.00	.15	.04
54	59.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	6.39	.00	.00	.15	.04
55	59.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	6.14	.00	.00	.15	.04
56	59.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	5.89	.00	.00	.15	.04
57	58.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	5.65	.00	.00	.15	.04
58	58.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	5.40	.00	.00	.15	.04
59	58.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	5.16	.00	.00	.15	.04
60	58.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	4.91	.00	.00	.15	.04
61	58.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	4.67	.00	.00	.15	.04
62	57.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	4.42	.00	.00	.15	.04
63	57.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	4.18	.00	.00	.15	.04
64	57.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	3.93	.00	.00	.15	.04
65	57.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	3.68	.00	.00	.15	.04
66	57.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	3.44	.00	.00	.15	.04
67	56.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	3.19	.00	.00	.15	.04
68	56.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	2.95	.00	.00	.15	.04
69	56.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	2.70	.00	.00	.15	.04
70	56.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	2.46	.00	.00	.15	.04

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-TI *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *	
71	56.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	2.21	.00	.00	.15	.04
72	55.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	1.96	.00	.00	.15	.04
73	55.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	1.72	.00	.00	.15	.04
74	55.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	1.47	.00	.00	.15	.04
75	55.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	1.23	.00	.00	.15	.04
76	55.000	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.98	.00	.00	.15	.04
77	54.800	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.74	.00	.00	.15	.04
78	54.600	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.49	.00	.00	.15	.04
79	54.400	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.25	.00	.00	.15	.04
80	54.200	8.11	2.39	.17	.10	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.15	.04
20 DEG C RATE: .13 .10 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .10																		
AVG 20 DEG C RATE: 2.13 .10 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .10																		

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-TI *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
22	65.800	26.00	.1	.0	.0	5.28	17.29	17.29	.00	1.00	1.00	2.00	1.00	216.3	.0	0.	20.82
23	65.600	26.00	.1	.0	.0	5.83	16.87	16.87	.00	1.00	1.00	2.00	1.00	212.5	.0	0.	20.35
24	65.400	26.00	.1	.0	.0	6.26	16.47	16.47	.00	1.00	1.00	2.00	1.00	208.8	.0	0.	19.89
25	65.200	26.00	.1	.0	.0	6.60	16.08	16.08	.00	1.00	1.00	2.00	1.00	205.1	.0	0.	19.45
26	65.000	26.00	.1	.0	.0	6.86	15.70	15.70	.00	1.00	1.00	2.00	1.00	201.4	.0	0.	19.02
27	64.800	26.00	.1	.0	.0	7.06	15.33	15.33	.00	1.00	1.00	2.00	1.00	197.6	.0	0.	18.60
28	64.600	26.00	.1	.0	.0	7.21	14.98	14.98	.00	1.00	1.00	2.00	1.00	193.9	.0	0.	18.19
29	64.400	26.00	.1	.0	.0	7.33	14.64	14.64	.00	1.00	1.00	2.00	1.00	190.2	.0	0.	17.79
30	64.200	26.00	.1	.0	.0	7.41	14.31	14.31	.00	1.00	1.00	2.00	1.00	186.4	.0	0.	17.40
31	64.000	26.00	.1	.0	.0	7.46	13.99	13.99	.00	1.00	1.00	2.00	1.00	182.7	.0	0.	17.02
32	63.800	26.00	.1	.0	.0	7.49	13.68	13.68	.00	1.00	1.00	2.00	1.00	179.0	.0	0.	16.65
33	63.600	26.00	.1	.0	.0	7.51	13.38	13.38	.00	1.00	1.00	2.00	1.00	175.3	.0	0.	16.29
34	63.400	26.00	.1	.0	.0	7.51	13.10	13.10	.00	1.00	1.00	2.00	1.00	171.5	.0	0.	15.94
35	63.200	26.00	.1	.0	.0	7.50	12.82	12.82	.00	1.00	1.00	2.00	1.00	167.8	.0	0.	15.60
36	63.000	26.00	.1	.0	.0	7.48	12.55	12.55	.00	1.00	1.00	2.00	1.00	164.1	.0	0.	15.27
37	62.800	26.00	.1	.0	.0	7.45	12.29	12.29	.00	1.00	1.00	2.00	1.00	160.3	.0	0.	14.95
38	62.600	26.00	.1	.0	.0	7.41	12.04	12.04	.00	1.00	1.00	2.00	1.00	156.6	.0	0.	14.63
39	62.400	26.00	.1	.0	.0	7.37	11.79	11.79	.00	1.00	1.00	2.00	1.00	152.9	.0	0.	14.32
40	62.200	26.00	.1	.0	.0	7.33	11.56	11.56	.00	1.00	1.00	2.00	1.00	149.2	.0	0.	14.02
41	62.000	26.00	.1	.0	.0	7.28	11.33	11.33	.00	1.00	1.00	2.00	1.00	145.4	.0	0.	13.73
42	61.800	26.00	.1	.0	.0	7.22	11.11	11.11	.00	1.00	1.00	2.00	1.00	141.7	.0	0.	13.45
43	61.600	26.00	.1	.0	.0	7.17	10.89	10.89	.00	1.00	1.00	2.00	1.00	138.0	.0	0.	13.17
44	61.400	26.00	.1	.0	.0	7.11	10.69	10.69	.00	1.00	1.00	2.00	1.00	134.2	.0	0.	12.90
45	61.200	26.00	.1	.0	.0	7.05	10.49	10.49	.00	1.00	1.00	2.00	1.00	130.5	.0	0.	12.63
46	61.000	26.00	.1	.0	.0	6.98	10.29	10.29	.00	1.00	1.00	2.00	1.00	126.8	.0	0.	12.38
47	60.800	26.00	.1	.0	.0	6.92	10.11	10.11	.00	1.00	1.00	2.00	1.00	123.1	.0	0.	12.12
48	60.600	26.00	.1	.0	.0	6.85	9.93	9.93	.00	1.00	1.00	2.00	1.00	119.3	.0	0.	11.88
49	60.400	26.00	.1	.0	.0	6.79	9.75	9.75	.00	1.00	1.00	2.00	1.00	115.6	.0	0.	11.64
50	60.200	26.00	.1	.0	.0	6.72	9.58	9.58	.00	1.00	1.00	2.00	1.00	111.9	.0	0.	11.41
51	60.000	26.00	.1	.0	.0	6.65	9.42	9.42	.00	1.00	1.00	2.00	1.00	108.1	.0	0.	11.18
52	59.800	26.00	.1	.0	.0	6.58	9.26	9.26	.00	1.00	1.00	2.00	1.00	104.4	.0	0.	10.96
53	59.600	26.00	.1	.0	.0	6.50	9.10	9.10	.00	1.00	1.00	2.00	1.00	100.7	.0	0.	10.74
54	59.400	26.00	.1	.0	.0	6.43	8.95	8.95	.00	1.00	1.00	2.00	1.00	96.9	.0	0.	10.53

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	ORGN MG/L	HM3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
55	59.200	26.00	.1	.0	6.36	8.81	8.81	.00	1.00	2.00	1.00	93.2	.0	0.	10.32
56	59.000	26.00	.1	.0	6.28	8.67	8.67	.00	1.00	2.00	1.00	89.5	.0	0.	10.12
57	58.800	26.00	.1	.0	6.21	8.53	8.53	.00	1.00	2.00	1.00	85.8	.0	0.	9.93
58	58.600	26.00	.1	.0	6.13	8.40	8.40	.00	1.00	2.00	1.00	82.0	.0	0.	9.73
59	59.400	26.00	.1	.0	6.05	8.27	8.27	.00	1.00	2.00	1.00	78.3	.0	0.	9.55
60	58.200	26.00	.1	.0	5.98	8.15	8.15	.00	1.00	2.00	1.00	74.6	.0	0.	9.36
61	58.000	26.00	.1	.0	5.90	8.03	8.03	.00	1.00	2.00	1.00	70.8	.0	0.	9.19
62	57.800	26.00	.1	.0	5.82	7.91	7.91	.00	1.00	2.00	1.00	67.1	.0	0.	9.01
63	57.600	26.00	.1	.0	5.74	7.80	7.80	.00	1.00	2.00	1.00	63.4	.0	0.	8.84
64	57.400	26.00	.1	.0	5.66	7.69	7.69	.00	1.00	2.00	1.00	59.7	.0	0.	8.68
65	57.200	26.00	.1	.0	5.58	7.58	7.58	.00	1.00	2.00	1.00	55.9	.0	0.	8.51
66	57.000	26.00	.1	.0	5.50	7.48	7.48	.00	1.00	2.00	1.00	52.2	.0	0.	8.36
67	56.800	26.00	.1	.0	5.42	7.38	7.38	.00	1.00	2.00	1.00	48.5	.0	0.	8.20
68	56.600	26.00	.1	.0	5.33	7.28	7.28	.00	1.00	2.00	1.00	44.7	.0	0.	8.05
69	56.400	26.00	.1	.0	5.25	7.19	7.19	.00	1.00	2.00	1.00	41.0	.0	0.	7.90
70	56.200	26.00	.1	.0	5.17	7.10	7.10	.00	1.00	2.00	1.00	37.3	.0	0.	7.76
71	56.000	26.00	.1	.0	5.08	7.01	7.01	.00	1.00	2.00	1.00	33.6	.0	0.	7.62
72	55.800	26.00	.1	.0	5.00	6.92	6.92	.00	1.00	2.00	1.00	29.8	.0	0.	7.48
73	55.600	26.00	.1	.0	4.92	6.84	6.84	.00	1.00	2.00	1.00	26.1	.0	0.	7.35
74	55.400	26.00	.1	.0	4.83	6.76	6.76	.00	1.00	2.00	1.00	22.4	.0	0.	7.21
75	55.200	26.00	.1	.0	4.75	6.68	6.68	.00	1.00	2.00	1.00	18.6	.0	0.	7.09
76	55.000	26.00	.1	.0	4.66	6.60	6.60	.00	1.00	2.00	1.00	14.9	.0	0.	6.96
77	54.800	26.00	.1	.0	4.57	6.52	6.52	.00	1.00	2.00	1.00	11.2	.0	0.	6.84
78	54.600	26.00	.1	.0	4.49	6.43	6.43	.00	1.00	2.00	1.00	7.5	.0	0.	6.71
79	54.400	26.00	.1	.0	4.39	6.29	6.29	.00	1.00	2.00	1.00	3.7	.0	0.	6.57
80	54.200	26.00	.1	.0	4.26	5.93	5.93	.00	1.00	2.00	1.00	.0	.0	0.	6.37

* CM-I - CHLORIDES MG/L
 ** G/CU M
 * CM-II - SULFATES MG/L
 NCM - NBOD MG/L

1
 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 4 HAZELWOOD GULLY TO COLFS GULLY

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	ORGN MG/L	HM3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
81	UPR RCH	.1002	26.00	.14	.0	.0	4.26	5.93	.00	1.00	1.00	1.00	.0	0.	6.37
EACH INCR		.0011	.00	.00	.0	.0	4.89	4.63	.00	.00	.00	.00	.00	0.	6.80
91	WSTLID	.0299	.00	.00	.0	.0	4.90	4.60	.00	.00	.00	.00	.00	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	NEAN VELO M/S
81	54.20	53.20	.1013	50.4	.010	1.18	.86	12.0	10320.	11999.9	10.3	1567.	.003	4.000	.010
82	53.20	52.20	.1024	49.8	.010	1.17	.86	12.0	10320.	11999.9	10.3	1923.	.004	4.000	.010
83	52.20	51.20	.1035	49.3	.010	1.15	.86	12.0	10320.	11999.9	10.3	2278.	.005	4.000	.010
84	51.20	50.20	.1046	48.8	.010	1.14	.86	12.0	10320.	11999.9	10.3	2634.	.006	4.000	.010

85	50.20	49.20	.1057	48.3	.010	1.13	.86	12.0	10320.	11999.9	10.3	2990.	.006	4.000	.010
86	49.20	48.20	.1068	47.8	.010	1.12	.86	12.0	10320.	11999.9	10.3	3345.	.007	4.000	.011
87	48.20	47.20	.1079	47.3	.010	1.11	.86	12.0	10320.	11999.9	10.3	3701.	.008	4.000	.011
88	47.20	46.20	.1090	46.8	.011	1.10	.86	12.0	10320.	11999.9	10.3	4057.	.009	4.000	.011
89	46.20	45.20	.1101	46.3	.011	1.08	.86	12.0	10320.	11999.9	10.3	4412.	.010	4.000	.012
90	45.20	44.20	.1112	45.9	.011	1.07	.86	12.0	10320.	11999.9	10.3	4768.	.010	4.000	.013
91	44.20	43.20	.1123	45.4	.011	1.06	.86	12.0	10320.	11999.9	10.3	5124.	.011	4.000	.013
92	43.20	42.20	.1134	45.0	.011	1.05	.86	12.0	10320.	11999.9	10.3	5479.	.012	4.000	.014
93	42.20	41.20	.1145	44.6	.011	1.04	.86	12.0	10320.	11999.9	10.3	5835.	.013	4.000	.015
94	41.20	40.20	.1155	44.6	.014	.82	.86	12.0	10320.	11999.9	10.3	6191.	.013	4.000	.016

TOT 15.23 144479. 167998.7 10.3
 AVG .011 23.44
 CUM

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAIR RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	AMBOD DECAT 1/DA	FULL SOD	CORR SOD	ORGN DECAT 1/DA	ORGN SETT 1/DA	ORGN DECAT 1/DA	MH3 DECAT 1/DA	MH3 SRCE	DEMIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	CO.1 DECAT 1/DA	NCH DECAT 1/DA	NCH SETT 1/DA
81	53.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
82	52.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
83	51.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
84	50.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
85	49.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
86	48.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
87	47.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
88	46.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
89	45.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
90	44.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
91	43.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
92	42.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
93	41.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09
94	40.200	8.11	1.08	.17	.10	.00	2.63	2.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.09

20 DEG C RATE .13
 AVG 20 DEG C RATE .96
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
81	53.200	26.00	.1	.0	.0	3.91	5.75	5.75	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.01
82	52.200	26.00	.1	.0	.0	3.75	5.60	5.60	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.69
83	51.200	26.00	.1	.0	.0	3.70	5.48	5.48	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.41
84	50.200	26.00	.1	.0	.0	3.70	5.39	5.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.24
85	49.200	26.00	.1	.0	.0	3.71	5.32	5.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.09
86	48.200	26.00	.1	.0	.0	3.73	5.27	5.27	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.96
87	47.200	26.00	.1	.0	.0	3.75	5.23	5.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.87

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAR RATE 1/DA	C-BOD DECY 1/DA	CBOD SFTT 1/DA	CEOD DECY 1/DA	REAR RATE 1/DA	DEACTY 1/DA	ORGN DECY 1/DA	ORGN SFTT 1/DA	ORGN DECY 1/DA	SI-TT 1/DA	ORGN DECY 1/DA	NH3 DECY 1/DA	NH3 SFTT 1/DA	NH3 DECY 1/DA	DENIT RATE 1/DA	SRCE 1/DA	PO4 SRCE	AI/G PROD	MAC PROD	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA	
103	31.800	7.96	.38	.18	.08	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.15
104	31.400	7.82	.38	.19	.08	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.16
20	DFG C RATE		.13		.08		.00		.00		.50		.00		.00		.00		.00		.00		.00	7.68	.08

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTH MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
103	31.800	27.00	.1	.0	.0	3.23	5.42	5.42	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.87
104	31.400	28.00	.1	.0	.0	3.22	5.46	5.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.16

* CH-I - CHLORIDES MG/L
 * CH-II - SULFATES MG/L
 RCM = HBOD MG/L

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FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 9 ATWOOD BAYOU TO BAYOU WIKOFF

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
141	UPR RCH	.2000	28.00	.13	.0	.0	3.22	5.46	5.46	.00	1.00	1.00	1.00	.0	.0	0.	5.16
141	TRIB	.0032	28.00	.13	.0	.0	3.39	5.46	5.46	.00	1.00	1.00	1.00	.0	.0	0.	5.43

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SFCT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPERSH SQ M/S	MEAN VELO M/S
141	31.40	30.85	.2032	63.0	.004	1.51	1.86	26.0	26570.	14285.0	48.3	16712.	.008	5.600	.008
142	30.85	30.30	.2032	63.0	.004	1.51	1.86	26.0	26570.	14285.0	48.3	17298.	.008	5.600	.008
TOT AVG			.004			3.03	1.86	26.0	53140.	28569.9	48.3				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOD *	CORR SOD *	ORGN DECAT 1/DA	ORGN SETT 1/DA	NH3 DECAT 1/DA	NH3 SRCE *	DEVIT RATE 1/DA	P04 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA
141	30.850	7.82	.45	.17	.08	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.14
142	30.300	7.82	.45	.17	.08	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.14
20 DEG C RATE																			
AVG 20 DEG C RATE .39																			
* G/SQ M/D ** MG/L/DAY																			

***** WATER QUALITY CONSTITUTEUT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTH MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
141	30.850	28.00	.1	.0	.0	3.37	5.47	5.47	.00	1.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.44
142	30.300	28.00	.1	.0	.0	3.59	5.39	5.39	.00	1.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.60

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * CM-III = NITRATES MG/L

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 13 BAYOU WIKOFF TO CROWLEY HIGH G.
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
205	UPR RCH	.2032	28.00	.11	.0	.0	3.59	5.39	5.39	.00	1.00	1.00	1.00	1.00	1.00	.0	.0	0.	5.60
205	TRIB	.2127	28.00	.11	.0	.0	4.89	4.80	4.80	.00	1.00	1.00	1.00	1.00	1.00	.0	.0	0.	4.93

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
205	30.30	29.50	.4159	51.1	.005	1.95	2.50	35.1	70175.	28070.2	87.7	18557.	.005	6.000	.006
206	29.50	28.70	.4159	51.1	.005	1.95	2.50	35.1	70175.	28070.2	87.7	19816.	.005	6.000	.006
207	28.70	27.90	.4159	51.1	.005	1.95	2.50	35.1	70175.	28070.2	87.7	21071.	.005	6.000	.006
208	27.90	27.10	.4159	51.1	.005	1.95	2.50	35.1	70175.	28070.2	87.7	22333.	.006	6.000	.006
TOT	7.81														
AVG	.005														
CUM	73.09														

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE J/DA	CBOD DECAY 1/DA	ANBOD DF-CAY 1/DA	FULL SOD	CORR SOD	ORGN DECAT 1/DA	ORGN SETT 1/DA	ORGN DECAT 1/DA	NI3 DECAT 1/DA	NI3 SRCE	DNIT RATE 1/DA	FO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA
205	29.500	7.75	.34	.18	.08	.00	.85	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.13
206	29.700	7.69	.34	.18	.08	.00	.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.13
207	27.900	7.62	.35	.19	.08	.00	.91	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.13
208	27.100	7.55	.35	.19	.08	.00	.94	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.13
20 DEG C RATE: .12																			
AVG 20 DEG C RATE .79																			
* G/SQ M/D ** MG/L/DAY																			

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEGS C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EROD MG/L	ORGI MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
205	29.500	28.50	.1	.0	.0	3.86	5.22	5.22	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.53
206	28.700	29.00	.1	.0	.0	3.38	5.34	5.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.86
207	27.900	29.50	.1	.0	.0	3.02	5.39	5.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.15
208	27.100	30.00	.1	.0	.0	2.81	5.36	5.36	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.48

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 HCH = FBOD MG/L
 ** G/CU M

FINAL REPORT B. PLAQUEMINE BRULE CROWLEY HIGH GULCH TO ROLLER C. CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	NI3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
228	UPR RCH	.4159	30.00	.10	.0	.0	2.81	5.36	5.36	.00	1.00	1.00	1.00	.0	0.	6.48
228	TRIB	.0017	30.00	.10	.0	.0	2.82	5.27	5.27	.00	1.00	1.00	1.00	.0	0.	6.79
247	WSTLD	.0821	.00	.00	.0	.0	7.80	10.80	10.80	.00	.00	.00	.00	.0	0.	25.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
228	27.10	26.90	.4176	51.2	.004	.54	2.63	34.3	19417.	6861.3	97.1	22683.	.005	6.900	.006
229	26.90	26.70	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	23032.	.005	6.900	.006
230	26.70	26.50	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	23381.	.005	6.900	.006
231	26.50	26.30	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	23731.	.005	6.900	.006

232	26.30	26.10	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	24080.	.006	6.900	.006
233	26.10	25.90	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	24429.	.006	6.900	.006
234	25.90	25.70	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	24779.	.006	6.900	.006
235	25.70	25.50	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	25128.	.006	6.900	.006
236	25.50	25.30	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	25478.	.006	6.900	.006
237	25.30	25.10	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	25827.	.006	6.900	.007
238	25.10	24.90	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	26176.	.006	6.900	.007
239	24.90	24.70	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	26526.	.006	6.900	.007
240	24.70	24.50	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	26875.	.006	6.900	.007
241	24.50	24.30	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	27224.	.006	6.900	.007
242	24.30	24.10	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	27574.	.006	6.900	.007
243	24.10	23.90	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	27923.	.006	6.900	.007
244	23.90	23.70	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	28273.	.006	6.900	.007
245	23.70	23.50	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	28622.	.007	6.900	.007
246	23.50	23.30	.4176	51.2	.004	.54	2.83	34.3	19417.	6861.3	97.1	28971.	.007	6.900	.007
247	23.30	23.10	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	29321.	.007	6.900	.008
248	23.10	22.90	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	29670.	.007	6.900	.008
249	22.90	22.70	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	30019.	.007	6.900	.008
250	22.70	22.50	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	30369.	.007	6.900	.008
251	22.50	22.30	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	30718.	.007	6.900	.008
252	22.30	22.10	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	31068.	.007	6.900	.008
253	22.10	21.90	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	31417.	.007	6.900	.008
254	21.90	21.70	.4997	59.2	.005	.45	2.83	34.3	19417.	6861.3	97.1	31766.	.007	6.900	.008

TOT 13.82 524272. 185255.0 97.1
 AVG .005 2.83 34.3
 CUM 86.91

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	KEARER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	FMBOD DECAY 1/DA	FULL SOD	CORR SOD	ORGH SETT 1/DA	ORGH DECAY 1/DA	NH3 D/CAY 1/DA	DUNIT SRCE 1/DA	FO4 SRCE	AUG PROD **	MAC PROD **	COLI DECAY 1/DA	HCM DECAY 1/DA	HCM SETT 1/DA	
228	26.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
229	26.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
230	26.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
231	26.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
232	26.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
233	25.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
234	25.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
235	25.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
236	25.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
237	25.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
238	24.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
239	24.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
240	24.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
241	24.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
242	24.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
243	23.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
244	23.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
245	23.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
246	23.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
247	23.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REARR RATE L/DA	CBOD DECAY L/DA	CBOD SETT L/DA	ANBOD DECAY L/DA	FU/L SOD *	CORR SOD *	ORGN DECAY L/DA	ORGN SETT L/DA	NH3 DECAY L/DA	NH3 SRCE *	DEINIT RATH L/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DE/CAY L/DA	NCM DE/CAY L/DA	NCM SETT L/DA	
255	21.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
256	21.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
257	21.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
258	20.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
259	20.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
260	20.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
261	20.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
262	20.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
263	19.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
264	19.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
265	19.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
266	19.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
267	19.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
268	18.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
269	18.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
270	18.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
271	18.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
272	18.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
273	17.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
274	17.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
275	17.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
276	17.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
277	17.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
278	16.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
279	16.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
280	16.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
281	16.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
282	16.100	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
283	15.900	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
284	15.700	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
295	15.500	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
286	15.300	7.55	.31	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
20 DEG C RATE:			.12	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AVG 20 DEG C RATE			.26	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TRMP DEG C	SALIN PPT	CM-1 *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
255	21.500	30.00	.1	.0	.0	2.91	4.86	4.86	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.95
256	21.300	30.00	.1	.0	.0	2.91	4.80	4.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.92
257	21.100	30.00	.1	.0	.0	2.91	4.74	4.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.88
258	20.900	30.00	.1	.0	.0	2.92	4.69	4.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.85
259	20.700	30.00	.1	.0	.0	2.93	4.64	4.64	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.81

FILE NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL. A UG/L	COLI #/100ML	NCM
260	20.500	30.00	.1	.0	2.94	4.59	4.59	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.78
261	20.300	30.00	.1	.0	2.95	4.55	4.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.75
262	20.100	30.00	.1	.0	2.96	4.51	4.51	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.71
263	19.900	30.00	.1	.0	2.97	4.47	4.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.68
264	19.700	30.00	.1	.0	2.99	4.43	4.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.65
265	19.500	30.00	.1	.0	3.00	4.40	4.40	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.61
266	19.300	30.00	.1	.0	3.02	4.37	4.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.58
267	19.100	30.00	.1	.0	3.03	4.34	4.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.55
268	18.900	30.00	.1	.0	3.05	4.31	4.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.51
269	18.700	30.00	.1	.0	3.06	4.28	4.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.48
270	18.500	30.00	.1	.0	3.08	4.26	4.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.44
271	18.300	30.00	.1	.0	3.09	4.23	4.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.40
272	18.100	30.00	.1	.0	3.11	4.21	4.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.36
273	17.900	30.00	.1	.0	3.12	4.18	4.18	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.32
274	17.700	30.00	.1	.0	3.13	4.16	4.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.28
275	17.500	30.00	.1	.0	3.14	4.13	4.13	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.24
276	17.300	30.00	.1	.0	3.15	4.11	4.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.19
277	17.100	30.00	.1	.0	3.16	4.08	4.08	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.14
278	16.900	30.00	.1	.0	3.17	4.05	4.05	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.09
279	16.700	30.00	.1	.0	3.17	4.02	4.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.03
280	16.500	30.00	.1	.0	3.17	3.99	3.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.96
281	16.300	30.00	.1	.0	3.16	3.95	3.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.90
282	16.100	30.00	.1	.0	3.14	3.90	3.90	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.82
283	15.900	30.00	.1	.0	3.12	3.85	3.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.74
284	15.700	30.00	.1	.0	3.09	3.79	3.79	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.64
285	15.500	30.00	.1	.0	3.04	3.73	3.73	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.54
286	15.300	30.00	.1	.0	2.98	3.65	3.65	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.43

* CM-I = CHLORIDES MG/L
 ** G/CU H

NCM - NBOD MG/L

CM-II = SULFATES MG/L

1 FINAL REPORT B. PLAQUEMINE BRULE BAYOU BLAUC TO N. COULFE TRIEE
 REACH NO. 22 BAYOU PLAQUEMINE BRULE WATERSHED CALIBRATION RUN

***** REACH INPUTS *****

FILE NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL. A UG/L	COLI #/100ML	NCM
390	UPR RCH	.4997	30.00	.10	.0	.0	2.98	3.65	3.65	.00	1.00	1.00	1.00	.0	0.	8.43
390	TRIEE	.1116	30.00	.10	.0	.0	2.78	3.51	3.51	.00	1.00	1.00	1.00	.0	0.	7.92

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
390	15.30	15.20	.6113	57.7	.003	.34	3.57	50.0	17857.	5002.0	178.6	54748.	.007	8.000	.007
391	15.20	15.10	.6113	57.7	.003	.34	3.57	50.0	17857.	5002.0	178.6	55045.	.007	8.000	.007
392	15.10	15.00	.6113	57.7	.003	.34	3.57	50.0	17857.	5002.0	178.6	55341.	.007	8.000	.007
393	15.00	14.90	.6113	57.7	.003	.34	3.57	50.0	17857.	5002.0	178.6	55638.	.007	8.000	.007
394	14.90	14.80	.6113	57.7	.003	.34	3.57	50.0	17857.	5002.0	178.6	55934.	.007	8.000	.007
TOT						1.69			89286.	25010.0					
AVG					.003		3.57	50.0			178.6				
CUM						105.64									

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST KM	SAT MG/L	REAER RATE 1/DA	CBOD SETT 1/DA	CBOD AMROD DECATY 1/DA	FULL SOD 1/DA	CORR SOD 1/DA	ORGN DECATY 1/DA	ORGN SETT 1/DA	ORGN DECATY 1/DA	III3 DECATY 1/DA	III3 SRCE 1/DA	DEINIT RATE 1/DA	POI SRCE 1/DA	ALG PROD **	MAC PROD **	COLI DECATY 1/DA	COLI DECATY 1/DA	NCM DECATY 1/DA	NCM
390	15.200	7.55	.24	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00
391	15.100	7.55	.24	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.06	.00
392	15.000	7.55	.24	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.06	.00
393	14.900	7.55	.24	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.06	.00
394	14.800	7.55	.24	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.06	.00
20	DE5 C RATE		.12			.00		.00		.00	.00	.00	.00	.00	.00	.00	.00	.00	20.82	.00
AVG	20 DEG C RATE	.20		.05				.00		.00										

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST KM	TEMP DEG C	SALN PPT	CM-I	CM-II	UO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
390	15.200	30.00	.1	.0	.0	2.93	3.59	3.59	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.35
391	15.100	30.00	.1	.0	.0	2.92	3.57	3.57	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.37
392	15.000	30.00	.1	.0	.0	2.92	3.56	3.56	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.38
393	14.900	30.00	.1	.0	.0	2.92	3.55	3.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.38
394	14.800	30.00	.1	.0	.0	2.92	3.55	3.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.38

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * NCM = NBOD MG/L
 ** G/CU M

1 FINAL REPORT B. PLAQUEMIRE BRULE
 REACH NO. 24 BELOW N. COULEE TRIEF

BAYOU PLAQUEMIRE BRULE WATERSHED
 CALIBRATION RUN

0 ***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGI MG/L	MF3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	HCN
405	UPR RCH	.6113	30.00	.10	.0	.0	2.92	3.55	3.55	.00	1.00	1.00	1.00	.0	0.	8.38
405	TRIEF	.0134	30.00	.10	.0	.0	2.92	3.58	3.58	.00	1.00	1.00	1.00	.0	0.	8.33

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
405	14.80	14.70	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	56232.	.008	8.400	.008
406	14.70	14.60	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	56530.	.008	8.400	.008
407	14.60	14.50	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	56828.	.008	8.400	.008
408	14.50	14.40	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	57126.	.008	8.400	.008
409	14.40	14.30	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	57423.	.008	8.400	.008
410	14.30	14.20	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	57721.	.008	8.400	.008
411	14.20	14.10	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	58019.	.008	8.400	.008
412	14.10	14.00	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	58317.	.008	8.400	.008
413	14.00	13.90	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	58615.	.008	8.400	.008
414	13.90	13.80	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	58913.	.008	8.400	.008
415	13.80	13.70	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	59211.	.008	8.400	.008
416	13.70	13.60	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	59508.	.008	8.400	.008
417	13.60	13.50	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	59806.	.008	8.400	.008
418	13.50	13.40	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	60104.	.008	8.400	.008
419	13.40	13.30	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	60402.	.008	8.400	.008
420	13.30	13.20	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	60700.	.008	8.400	.008
421	13.20	13.10	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	60998.	.008	8.400	.008
422	13.10	13.00	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	61296.	.008	8.400	.008
423	13.00	12.90	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	61593.	.008	8.400	.008
424	12.90	12.80	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	61891.	.008	8.400	.008
425	12.80	12.70	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	62189.	.008	8.400	.008
426	12.70	12.60	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	62487.	.008	8.400	.008
427	12.60	12.50	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	62785.	.008	8.400	.008
428	12.50	12.40	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	63083.	.008	8.400	.008
429	12.40	12.30	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	63381.	.008	8.400	.008
430	12.30	12.20	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	63678.	.008	8.400	.008
431	12.20	12.10	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	63976.	.008	8.400	.008
432	12.10	12.00	.6246	57.0	.004	.30	3.43	47.8	16393.	4779.4	163.9	64274.	.008	8.400	.008

TOT	8.51	459016.	133824.0	163.9
AVG	.004			
CUM	114.15			

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	AVIBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 SRCE *	NH3 DECAY 1/DA	DIMIT RATE 1/DA	POA SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA	
405	14.700	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
406	14.600	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
407	14.500	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
408	14.400	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
409	14.300	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
410	14.200	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
411	14.100	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
412	14.000	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
413	13.900	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
414	13.800	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
415	13.700	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
416	13.600	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
417	13.500	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
418	13.400	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
419	13.300	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
420	13.200	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
421	13.100	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
422	13.000	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
423	12.900	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
424	12.800	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
425	12.700	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
426	12.600	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
427	12.500	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
428	12.400	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
429	12.300	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
430	12.200	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
431	12.100	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
432	12.000	7.55	.25	.19	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00
20	DEG C RATE.			.12	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	19.89		.00
AVG 20	DEG C RATE		.21	.05																

* G/SQ M/D ** MG/L/DAI

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SAUW PPT	CM-I *	CM-II *	DO MG/L	IBOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTH MG/L	PHOS MG/L	CHL. A UG/L	MACRO **	COLI #/100ML	NCM *
405	14.700	30.00	.1	.0	.0	2.92	3.55	3.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.36
406	14.600	30.00	.1	.0	.0	2.92	3.54	3.54	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.35
407	14.500	30.00	.1	.0	.0	2.92	3.54	3.54	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.34
408	14.400	30.00	.1	.0	.0	2.92	3.53	3.53	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.32
409	14.300	30.00	.1	.0	.0	2.92	3.53	3.53	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.30
410	14.200	30.00	.1	.0	.0	2.92	3.52	3.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.28
411	14.100	30.00	.1	.0	.0	2.92	3.52	3.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.25
412	14.000	30.00	.1	.0	.0	2.92	3.51	3.51	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.22
413	13.900	30.00	.1	.0	.0	2.92	3.51	3.51	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.19

ELEM NO.	TYPE	FLOW CHS	TEMP DEG C	SALIN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	HH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
414	13.800	30.00	.1	.0	2.91	3.50	3.50	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.16
415	13.700	30.00	.1	.0	2.91	3.49	3.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.13
416	13.600	30.00	.1	.0	2.91	3.49	3.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.09
417	13.500	30.00	.1	.0	2.91	3.48	3.48	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.05
418	13.400	30.00	.1	.0	2.90	3.47	3.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.00
419	13.300	30.00	.1	.0	2.90	3.47	3.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.95
420	13.200	30.00	.1	.0	2.89	3.46	3.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.90
421	13.100	30.00	.1	.0	2.89	3.45	3.45	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.84
422	13.000	30.00	.1	.0	2.88	3.44	3.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.78
423	12.900	30.00	.1	.0	2.87	3.43	3.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.71
424	12.800	30.00	.1	.0	2.86	3.42	3.42	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.64
425	12.700	30.00	.1	.0	2.85	3.41	3.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.57
426	12.600	30.00	.1	.0	2.84	3.40	3.40	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.49
427	12.500	30.00	.1	.0	2.82	3.39	3.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.40
428	12.400	30.00	.1	.0	2.80	3.37	3.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.31
429	12.300	30.00	.1	.0	2.78	3.36	3.36	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.21
430	12.200	30.00	.1	.0	2.76	3.34	3.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.10
431	12.100	30.00	.1	.0	2.73	3.33	3.33	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.99
432	12.000	30.00	.1	.0	2.70	3.31	3.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.87

* CH-I = CHLORIDES MG/L
 ** G/CU M
 NCM = NBOD MG/L

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 25 ABOVE BAYOU JONAS

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****																
ELEM NO.	TYPE	FLOW CHS	TEMP DEG C	SALIN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	HH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
433	UPR RCH	.6246	30.00	.10	.0	.0	2.70	3.31	3.31	.00	1.00	1.00	1.00	.0	0.	6.87
438	WSTLD	.0464	.00	.00	.0	.0	4.90	4.60	4.60	.00	1.00	.00	.00	.0	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****																
ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CHS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISH CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S	
433	12.00	11.00	.6246	57.0	.002	5.29	4.50	63.5	285714.	63492.1	285.7	68565.	.005	9.300	.006	
434	11.00	10.00	.6246	57.0	.002	5.29	4.50	63.5	285714.	63492.1	285.7	73056.	.006	9.300	.006	
435	10.00	9.00	.6246	57.0	.002	5.29	4.50	63.5	285714.	63492.1	285.7	77447.	.006	9.300	.006	
436	9.00	8.00	.6246	57.0	.002	5.29	4.50	63.5	285714.	63492.1	285.7	81839.	.006	9.300	.007	
437	8.00	7.00	.6246	57.0	.002	5.29	4.50	63.5	285714.	63492.1	285.7	86230.	.007	9.300	.007	
438	7.00	6.00	.6710	60.0	.002	4.93	4.50	63.5	285714.	63492.1	285.7	90621.	.007	9.300	.007	

TOTL		AVG		CUM	
31.40	4.50	63.5	1714286.	380952.4	285.7
.002	145.55				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAR RATE 1/DA	CBOD DECY 1/DA	CBOD SETT 1/DA	SALN PPT	CM-I	CM-II	FO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	ORGN DECY 1/DA	ORGN SETT 1/DA	NH3 DECY 1/DA	NH3 SRCE	NH3 DENIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECY 1/DA	NCM DECY 1/DA	NCM SHTT 1/DA																						
433	11.000	7.55	.18	.19	.05	.00	.00	.00	2.60	3.25	3.25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00																					
434	10.000	7.55	.18	.19	.05	.00	.00	.00	2.54	3.20	3.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00																					
435	9.000	7.55	.18	.19	.05	.00	.00	.00	2.52	3.19	3.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00																					
436	8.000	7.55	.18	.19	.05	.00	.00	.00	2.54	3.22	3.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00																					
437	7.000	7.55	.18	.19	.05	.00	.00	.00	2.60	3.31	3.31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00																					
438	6.000	7.55	.18	.19	.05	.00	.00	.00	2.70	3.50	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00																					
20 DEG C RATE																							.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
AVG 20 DEG C RATE																							.15	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALH PPT	CM-I	CM-II	FO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM #/100ML
433	11.000	30.00	.1	.0	.0	2.60	3.25	3.25	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.49
434	10.000	30.00	.1	.0	.0	2.54	3.20	3.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.99
435	9.000	30.00	.1	.0	.0	2.52	3.19	3.19	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.60
436	8.000	30.00	.1	.0	.0	2.54	3.22	3.22	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.30
437	7.000	30.00	.1	.0	.0	2.60	3.31	3.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.11
438	6.000	30.00	.1	.0	.0	2.70	3.50	3.50	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.04

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * G/CU M
 NCM - NHOD MG/L

1
 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 26 BAYOU JONAS TO BAYOU DES CRAINES
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO	COLI #/100ML	NCM
439	UPR RCH	.6710	30.00	.10	.0	.0	2.70	3.50	3.50	.00	1.00	1.00	1.00	1.00	.0	0.	5.04

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	PHOS CU M	PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
439	6.00	5.00	.6710	60.0	.003	3.32	3.71	51.8	192308.	51835.0	192.3	94560.	.011	10.200	10.200	.012
440	5.00	4.00	.6710	60.0	.003	3.32	3.71	51.8	192308.	51835.0	192.3	98500.	.011	10.200	10.200	.012

441	4.00	3.00	.6710	60.0	.003	3.32	3.71	51.8	192308.	51835.0	192.3	102439.	.012	10.200	.012
442	3.00	2.00	.6710	60.0	.003	3.32	3.71	51.8	192308.	51835.0	192.3	106379.	.012	10.200	.012
443	2.00	1.00	.6710	60.0	.003	3.32	3.71	51.8	192308.	51835.0	192.3	110318.	.013	10.200	.013
444	1.00	.00	.6710	60.0	.003	3.32	3.71	51.8	192308.	51835.0	192.3	114257.	.013	10.200	.013
TOT						19.90	3.71	51.8	1153846.	311009.8	192.3				
AVG					.003	165.45									
CUM															

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAY D.O.	REAER RATE	CBOD DECAY	CM-II	DO	BOD	EBOD	ORGH	IIH3	NO3/2	TOTH	PHOS	CHL.A	MACRO	COLI	NCH
		MG/L	1/DA	1/DA		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	#/100ML	NCH
439	5.000	7.75	.22	.18	.05	.00	3.90	3.90	.00	.00	.83	1.67	.83	.0	.0	0.	5.07
440	4.000	7.95	.22	.17	.05	.00	4.30	4.30	.00	.00	.67	1.33	.67	.0	.0	0.	5.13
441	3.000	8.16	.21	.15	.05	.00	4.65	4.65	.00	.00	.50	1.00	.50	.0	.0	0.	5.20
442	2.000	8.38	.21	.14	.05	.00	4.98	4.98	.00	.00	.33	.67	.33	.0	.0	0.	5.26
443	1.000	8.61	.20	.13	.05	.00	5.29	5.29	.00	.00	.17	.33	.17	.0	.0	0.	5.27
444	.000	8.86	.19	.13	.05	.00	5.58	5.58	.00	.00	.00	.00	.00	.0	.0	0.	5.21

20 DEG C RATE .19
 AVG 20 DEG C RATE .12
 ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP	SALN	CM-I	CM-II	DO	BOD	EBOD	ORGH	IIH3	NO3/2	TOTH	PHOS	CHL.A	MACRO	COLI	NCH
		DEG C	PPT			MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	MG/L	#/100ML	NCH
439	5.000	28.51	.2	.0	.0	2.93	3.90	3.90	.00	.83	.83	1.67	.83	.0	.0	0.	5.07
440	4.000	27.02	.4	.0	.0	3.16	4.30	4.30	.00	.67	.67	1.33	.67	.0	.0	0.	5.13
441	3.000	25.53	.5	.0	.0	3.38	4.65	4.65	.00	.50	.50	1.00	.50	.0	.0	0.	5.20
442	2.000	24.04	.6	.0	.0	3.61	4.98	4.98	.00	.33	.33	.67	.33	.0	.0	0.	5.26
443	1.000	22.55	.8	.0	.0	3.85	5.29	5.29	.00	.17	.17	.33	.17	.0	.0	0.	5.27
444	.000	21.06	.9	.0	.0	4.11	5.58	5.58	.00	.00	.00	.00	.00	.0	.0	0.	5.21

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * NCH = NITROGEN MG/L

1
 STREAM SUMMARY
 B. PLAQUEMINE BRUIE

TRAVEL TIME = 165.4 DAYS
 MAXIMUM EFFLUENT = 63.3 PERCENT
 FLOW = .0318 TO .6710 CMS
 DISPERSION = .0000 TO 10.2000 SQ M/S

BAYOU PLAQUEMINE BRUIE WATERSHED
 CALIBRATION RUN

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD SETT 1/DA	CBOD AN/BOD SETT 1/DA	FULL SOD 1/DA	CORR SOD 1/DA	ORGN DECAT 1/DA	ORGN SETT 1/DA	NH3 DECAT 1/DA	NH3 SRCE 1/DA	DENIT' RATE 1/DA	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAT 1/DA	NCM DF/CAY 1/DA	NCM SETT 1/DA	
105	3.500	8.11	3.61	.11	.25	.00	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.05	
106	3.400	8.11	3.61	.16	.25	.00	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.05	
20 DEG C RATE			.13		.25		2.40		.00		.00	.00	.00			.00	7.71		
AVG 20 DEG C RATE			3.22		.25				.00									.25	

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-1	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	ORGNI MG/L	NH3 MG/L	NO3+2 MG/L	TOTH MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
105	3.500	26.00	.1	.0	.0	1.23	26.29	26.29	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	31.34
106	3.400	26.00	.1	.0	.0	1.85	16.63	16.63	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.52

* CM-I = CHLORIDES MG/L
 ** G/CU H
 CM-II = SULFATES MG/L
 CM-III = NBOD MG/L

***** BAYOU PLAQUEMINE BRULE WATERSHED CALIBRATION RUN *****

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	FINOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
107	UPR RCH	.0007	26.00	.14	.0	.0	1.85	16.63	16.63	.00	1.00	1.00	1.00	.0	0.	20.52
108	EACH IHCR	.0001	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.00	0.	6.80
107	WSTLD	.0009	.00	.00	.0	.0	4.80	9.50	9.50	.00	.00	.00	.00	.00	0.	1.70

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
107	3.40	3.30	.0016	90.6	.003	.39	.20	2.6	54.	263.0	.5	0.	.000	.146	.003
108	3.30	3.20	.0016	87.8	.003	.39	.20	2.7	55.	267.6	.5	0.	.000	.148	.003
109	3.20	3.10	.0017	85.2	.003	.38	.21	2.7	56.	272.2	.6	0.	.000	.150	.003
110	3.10	3.00	.0017	82.8	.003	.38	.21	2.8	57.	276.7	.6	0.	.000	.152	.003
111	3.00	2.90	.0018	80.4	.003	.38	.21	2.8	59.	281.1	.6	0.	.000	.154	.003
112	2.90	2.80	.0018	78.3	.003	.37	.21	2.9	59.	285.5	.6	0.	.000	.155	.003
113	2.80	2.70	.0019	76.2	.003	.37	.21	2.9	60.	289.8	.6	0.	.000	.157	.003
114	2.70	2.60	.0019	74.2	.003	.37	.21	2.9	61.	294.1	.6	0.	.000	.159	.003

115	2.60	2.50	.0020	.72.4	.003	.36	.21	3.0	62.	298.3	.6	0.	.000	.161	.003
116	2.50	2.40	.0020	70.6	.003	.36	.21	3.0	63.	302.5	.6	0.	.000	.162	.003
117	2.40	2.30	.0021	68.9	.003	.36	.21	3.1	64.	306.6	.6	0.	.000	.164	.003
118	2.30	2.20	.0021	67.3	.003	.35	.21	3.1	65.	310.7	.7	0.	.000	.166	.003
119	2.20	2.10	.0022	65.8	.003	.35	.21	3.1	66.	314.7	.7	0.	.000	.167	.003
120	2.10	2.00	.0022	64.3	.003	.35	.21	3.2	67.	318.7	.7	0.	.000	.169	.003
121	2.00	1.90	.0023	62.9	.003	.35	.21	3.2	68.	322.6	.7	0.	.000	.170	.003
122	1.90	1.80	.0023	61.5	.003	.34	.21	3.3	69.	326.5	.7	0.	.000	.172	.003
123	1.80	1.70	.0024	60.2	.003	.34	.21	3.3	70.	330.3	.7	0.	.000	.174	.003
124	1.70	1.60	.0024	59.0	.003	.34	.21	3.3	71.	334.1	.7	0.	.000	.175	.003
125	1.60	1.50	.0025	57.8	.003	.34	.21	3.4	72.	337.9	.7	0.	.000	.177	.003
126	1.50	1.40	.0025	56.7	.003	.33	.21	3.4	73.	341.6	.7	0.	.000	.178	.003
127	1.40	1.30	.0026	55.6	.003	.33	.21	3.5	74.	345.3	.7	0.	.000	.180	.003
128	1.30	1.20	.0026	54.5	.004	.33	.21	3.5	75.	349.0	.7	0.	.000	.181	.004
129	1.20	1.10	.0027	53.5	.004	.33	.22	3.5	76.	352.6	.8	0.	.000	.183	.004
130	1.10	1.00	.0027	52.6	.004	.32	.22	3.6	77.	356.2	.8	0.	.000	.184	.004
131	1.00	.90	.0028	51.6	.004	.32	.22	3.6	78.	359.8	.8	0.	.000	.186	.004
132	.90	.80	.0028	50.7	.004	.32	.22	3.6	79.	363.3	.8	0.	.000	.187	.004
133	.80	.70	.0029	49.8	.004	.32	.22	3.7	80.	366.8	.8	0.	.000	.188	.004
134	.70	.60	.0029	49.0	.004	.32	.22	3.7	81.	370.3	.8	0.	.000	.190	.004
135	.60	.50	.0030	48.2	.004	.32	.22	3.7	81.	373.7	.8	0.	.000	.191	.004
136	.50	.40	.0031	47.4	.004	.31	.22	3.8	82.	377.1	.8	0.	.000	.193	.004
137	.40	.30	.0031	46.6	.004	.31	.22	3.8	83.	380.5	.8	0.	.000	.194	.004
138	.30	.20	.0031	45.9	.004	.31	.22	3.8	84.	383.9	.8	0.	.000	.195	.004
139	.20	.10	.0032	45.1	.004	.31	.22	3.9	85.	387.2	.8	0.	.000	.197	.004
140	.10	.00	.0032	44.4	.004	.31	.22	3.9	86.	390.5	.9	0.	.000	.198	.004
TOT						11.64	.21	3.3	2393.	11230.7	.7				
AVG			.003												
CUM						14.42									

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELIUM NO.	ENDING DIST	SAT D.O. MG/L	REARER RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	AJIBOD DECAT 1/DA	FULL SOD +	CORR SOD +	ORGI DECAT 1/DA	ORGI SETT 1/DA	NH3 DECAT 1/DA	NH3 SRCE	DEHIT RATE 1/DA	PO1 SRCI *	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCH DECAT 1/DA	NCH SETT 1/DA	
107	3.300	8.10	3.67	.17	.14	.00	1.76	1.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
108	3.200	8.09	3.67	.17	.14	.00	1.76	1.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
109	3.100	8.08	3.68	.17	.14	.00	1.77	1.77	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
110	3.000	8.07	3.68	.17	.14	.00	1.78	1.78	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
111	2.900	8.06	3.68	.17	.14	.00	1.78	1.78	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
112	2.800	8.06	3.69	.17	.14	.00	1.79	1.79	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
113	2.700	8.05	3.69	.17	.13	.00	1.80	1.80	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
114	2.600	8.04	3.70	.17	.13	.00	1.80	1.80	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
115	2.500	8.03	3.70	.18	.13	.00	1.81	1.81	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
116	2.400	8.02	3.70	.18	.13	.00	1.82	1.82	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
117	2.300	8.01	3.71	.18	.13	.00	1.82	1.82	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
118	2.200	8.00	3.71	.18	.13	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.03	.03
119	2.100	8.00	3.72	.18	.13	.00	1.84	1.84	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.03	.03
120	2.000	7.99	3.72	.18	.13	.00	1.84	1.84	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.03	.03
121	1.900	7.98	3.72	.18	.13	.00	1.85	1.85	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.03	.03
122	1.800	7.97	3.73	.18	.13	.00	1.86	1.86	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.03	.03
123	1.700	7.96	3.73	.18	.13	.00	1.86	1.86	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.03	.03

133	.700	27.59	.1	.0	.0	4.98	5.43	5.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.71
134	.600	27.65	.1	.0	.0	4.98	5.35	5.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.62
135	.500	27.71	.1	.0	.0	4.97	5.27	5.27	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.54
136	.400	27.76	.1	.0	.0	4.97	5.20	5.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.46
137	.300	27.82	.1	.0	.0	4.96	5.14	5.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.41
138	.200	27.88	.1	.0	.0	4.91	5.11	5.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.43
139	.100	27.94	.1	.0	.0	4.67	5.16	5.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.63
140	.000	28.00	.1	.0	.0	3.39	5.46	5.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.43

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = NBOD MG/L

1
STREAM SUMMARY
ATWOOD GULLY
BAYOU PLAQUEMINE BRULE WATERSHED
CALIBRATION RUN

TRAVEL TIME = 14.4 DAYS
MAXIMUM EFFLUENT = 91.9 PERCENT

FLOW = .0006 TO .0032 CMS
DISPERSION = .0411 TO .1980 SQ M/S
VELOCITY = .0008 TO .0038 M/S
DEPTH = .20 TO .22 M
WIDTH = 2.6 TO 3.9 M
BOD DECAY = .11 TO .19 PER DAY
NH3 DECAY = .00 TO .00 PER DAY
SDMNT OXYGEN DMND = 1.76 TO 3.50 G/SQ M/D
NH3 SOURCE = .00 TO .00 G/SQ M/D
REAKRATION = 3.61 TO 3.80 PER DAY
BOD SETTLING = .13 TO .25 PER DAY
ORGN DECAY = .00 TO .00 PER DAY
ORGN SETTLING = .00 TO .00 PER DAY
TEMPERATURE = 26.00 TO 28.00 DEG C
DISSOLVED OXYGEN = 1.23 TO 4.98 MG/L

1
FINAL REPORT
REACH NO. 10
SILLS GULLY
SILLS GULLY
BAYOU PLAQUEMINE BRULE WATERSHED
CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
143	HDMTR	.0154	.00	.00	.0	.0	4.80	9.49	9.49	.00	.00	.00	.00	.0	0.	1.73
EACH INCR		.0000	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
143	WSTLD	.0004	.00	.00	.0	.0	7.80	16.10	16.10	.00	2.10	.00	.00	.0	0.	9.00

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
143	16.10	16.00	.0159	2.8	.016	.07	.24	4.2	100.	417.5	1.0	0.	.000	.897	.016
144	16.00	15.90	.0160	2.8	.016	.07	.24	4.2	100.	418.2	1.0	0.	.000	.898	.016
145	15.90	15.80	.0160	2.7	.016	.07	.24	4.2	101.	418.9	1.0	0.	.000	.899	.016
146	15.80	15.70	.0161	2.7	.016	.07	.24	4.2	101.	419.5	1.0	0.	.000	.901	.016
TOT						.29			402.	1674.0					
AVG					.016		.24	4.2			1.0				
CUM						.29									

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA	
143	16.000	8.11	4.17	.17	.25	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.20	.06
144	15.900	8.11	4.17	.17	.25	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.20	.06
145	15.800	8.11	4.17	.17	.25	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.20	.06
146	15.700	8.11	4.17	.17	.25	.00	3.50	3.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.20	.06
20 DEG C RATE						.13			.00	2.40	.00	.00	.00	.00			.00	.00	7.76	.25
AVG 20 DEG C RATE						3.72			.25											

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MAGRO **	COLI #/100ML	NCM *
143	16.000	26.00	.1	.0	.0	4.66	9.22	9.22	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.91
144	15.900	26.00	.1	.0	.0	4.56	8.94	8.94	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.89
145	15.800	26.00	.1	.0	.0	4.48	8.68	8.68	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.90
146	15.700	26.00	.1	.0	.0	4.43	8.47	8.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.95

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NGM *
147	UPR RCH	.0161	26.00	.14	.0	.0	4.43	8.47	8.47	.00	1.00	1.00	1.00	.0	0.	1.95
EACH INCR		.0001	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
147	WSTLD	.0025	.00	.00	.0	.0	4.80	9.50	9.50	.00	.00	.00	.00	.0	0.	1.70
150	WSTLD	.0035	.00	.00	.0	.0	2.00	11.50	11.50	.00	.00	.00	.00	.0	0.	43.00

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
147	15.70	15.60	.0186	15.6	.021	.06	.24	3.7	90.	373.9	.9	0.	.000	1.168	.021
148	15.60	15.50	.0186	15.5	.021	.06	.24	3.7	90.	374.4	.9	0.	.000	1.169	.021
149	15.50	15.40	.0187	15.5	.021	.06	.24	3.7	90.	374.9	.9	0.	.000	1.171	.021
150	15.40	15.30	.0222	28.6	.022	.05	.25	4.1	101.	410.2	1.0	0.	.000	1.266	.022
151	15.30	15.20	.0222	28.6	.022	.05	.25	4.1	101.	410.7	1.0	0.	.000	1.268	.022
152	15.20	15.10	.0223	28.5	.022	.05	.25	4.1	101.	411.2	1.0	0.	.000	1.269	.022
153	15.10	15.00	.0223	28.4	.022	.05	.25	4.1	102.	411.7	1.0	0.	.000	1.270	.022
154	15.00	14.90	.0224	28.4	.022	.05	.25	4.1	102.	412.2	1.0	0.	.000	1.271	.022
155	14.90	14.80	.0224	28.3	.022	.05	.25	4.1	102.	412.7	1.0	0.	.000	1.273	.022
156	14.80	14.70	.0225	28.2	.022	.05	.25	4.1	102.	413.1	1.0	0.	.000	1.274	.022
157	14.70	14.60	.0225	28.2	.022	.05	.25	4.1	102.	413.6	1.0	0.	.000	1.275	.022
158	14.60	14.50	.0226	28.1	.022	.05	.25	4.1	102.	414.1	1.0	0.	.000	1.277	.022
159	14.50	14.40	.0226	28.0	.022	.05	.25	4.1	102.	414.6	1.0	0.	.000	1.278	.022
160	14.40	14.30	.0227	28.0	.022	.05	.25	4.2	103.	415.1	1.0	0.	.000	1.279	.022
161	14.30	14.20	.0227	27.9	.022	.05	.25	4.2	103.	415.6	1.0	0.	.000	1.281	.022
162	14.20	14.10	.0228	27.9	.022	.05	.25	4.2	103.	416.0	1.0	0.	.000	1.282	.022
163	14.10	14.00	.0228	27.8	.022	.05	.25	4.2	103.	416.5	1.0	0.	.000	1.283	.022
164	14.00	13.90	.0229	27.7	.022	.05	.25	4.2	103.	417.0	1.0	0.	.000	1.285	.022
165	13.90	13.80	.0230	27.7	.022	.05	.25	4.2	103.	417.5	1.0	0.	.000	1.286	.022
166	13.80	13.70	.0230	27.6	.022	.05	.25	4.2	104.	418.0	1.0	0.	.000	1.287	.022
167	13.70	13.60	.0231	27.5	.022	.05	.25	4.2	104.	418.5	1.0	0.	.000	1.289	.022
168	13.60	13.50	.0231	27.5	.022	.05	.25	4.2	104.	418.9	1.0	0.	.000	1.291	.022
169	13.50	13.40	.0232	27.4	.022	.05	.25	4.2	104.	419.4	1.0	0.	.000	1.291	.022
170	13.40	13.30	.0232	27.4	.022	.05	.25	4.2	104.	419.9	1.0	0.	.000	1.293	.022
171	13.30	13.20	.0233	27.3	.022	.05	.25	4.2	104.	420.4	1.0	0.	.000	1.294	.022
172	13.20	13.10	.0233	27.2	.022	.05	.25	4.2	104.	420.8	1.0	0.	.000	1.295	.022
173	13.10	13.00	.0234	27.2	.022	.05	.25	4.2	105.	421.3	1.0	0.	.000	1.296	.022
174	13.00	12.90	.0234	27.1	.022	.05	.25	4.2	105.	421.8	1.0	0.	.000	1.298	.022
175	12.90	12.80	.0235	27.1	.022	.05	.25	4.2	105.	422.3	1.0	0.	.000	1.299	.022
176	12.80	12.70	.0235	27.0	.022	.05	.25	4.2	105.	422.8	1.1	0.	.000	1.300	.022
177	12.70	12.60	.0236	26.9	.022	.05	.25	4.2	105.	423.2	1.1	0.	.000	1.302	.022
178	12.60	12.50	.0236	26.9	.022	.05	.25	4.2	105.	423.7	1.1	0.	.000	1.303	.022
179	12.50	12.40	.0237	26.8	.022	.05	.25	4.2	106.	424.2	1.1	0.	.000	1.304	.022

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM * NCM
176	12.700	7.88	4.56	.18	.25	3.87	3.87	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
177	12.600	7.87	4.56	.18	.25	3.89	3.89	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
178	12.500	7.86	4.56	.19	.25	3.90	3.90	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
179	12.400	7.86	4.57	.19	.25	3.91	3.91	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
180	12.300	7.85	4.57	.19	.25	3.92	3.92	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
181	12.200	7.84	4.58	.19	.25	3.94	3.94	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
182	12.100	7.83	4.58	.19	.25	3.95	3.95	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
183	12.000	7.83	4.59	.19	.25	3.96	3.96	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
184	11.900	7.82	4.59	.19	.25	3.98	3.98	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
185	11.800	7.81	4.59	.19	.25	3.99	3.99	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06
186	11.700	7.80	4.60	.19	.25	4.00	4.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
187	11.600	7.80	4.60	.19	.25	4.02	4.02	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
188	11.500	7.79	4.61	.19	.25	4.03	4.03	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
189	11.400	7.78	4.61	.19	.25	4.04	4.04	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
190	11.300	7.78	4.62	.19	.25	4.06	4.06	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
191	11.200	7.77	4.62	.19	.25	4.07	4.07	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
192	11.100	7.76	4.62	.19	.25	4.09	4.09	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
193	11.000	7.75	4.63	.19	.25	4.10	4.10	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06

20 DEG C RATE 3.95
 AVG 20 DEG C RATE .13
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM * NCM
147	15.600	26.05	.1	.0	.0	4.44	8.36	8.36	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.11
148	15.500	26.11	.1	.0	.0	4.40	8.20	8.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.64
149	15.400	26.16	.1	.0	.0	4.31	8.12	8.12	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.16
150	15.300	26.21	.1	.0	.0	4.09	8.27	8.27	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.01
151	15.200	26.27	.1	.0	.0	4.10	8.08	8.08	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.90
152	15.100	26.32	.1	.0	.0	4.11	7.90	7.90	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.79
153	15.000	26.37	.1	.0	.0	4.12	7.72	7.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.69
154	14.900	26.43	.1	.0	.0	4.12	7.54	7.54	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.58
155	14.800	26.48	.1	.0	.0	4.13	7.37	7.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.47
156	14.700	26.53	.1	.0	.0	4.13	7.20	7.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.37
157	14.600	26.59	.1	.0	.0	4.13	7.04	7.04	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.27
158	14.500	26.64	.1	.0	.0	4.13	6.88	6.88	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.17
159	14.400	26.69	.1	.0	.0	4.13	6.73	6.73	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.07
160	14.300	26.74	.1	.0	.0	4.13	6.57	6.57	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.97
161	14.200	26.80	.1	.0	.0	4.12	6.43	6.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.87
162	14.100	26.85	.1	.0	.0	4.12	6.28	6.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.78
163	14.000	26.90	.1	.0	.0	4.12	6.14	6.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.69
164	13.900	26.96	.1	.0	.0	4.11	6.00	6.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.59
165	13.800	27.01	.1	.0	.0	4.11	5.87	5.87	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.50
166	13.700	27.06	.1	.0	.0	4.10	5.74	5.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.41
167	13.600	27.12	.1	.0	.0	4.10	5.61	5.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.32
168	13.500	27.17	.1	.0	.0	4.09	5.49	5.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.24
169	13.400	27.22	.1	.0	.0	4.09	5.36	5.36	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.15
170	13.300	27.28	.1	.0	.0	4.08	5.25	5.25	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.07
171	13.200	27.33	.1	.0	.0	4.08	5.13	5.13	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.98

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM	MEAN VELO M/S
172	13.100	27.38	.1	.0	.0	4.07	5.02	5.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.90	
173	13.000	27.44	.1	.0	.0	4.06	4.91	4.91	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.82	
174	12.900	27.49	.1	.0	.0	4.06	4.80	4.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.74	
175	12.800	27.54	.1	.0	.0	4.05	4.69	4.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.66	
176	12.700	27.60	.1	.0	.0	4.04	4.59	4.59	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.58	
177	12.600	27.65	.1	.0	.0	4.04	4.49	4.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.50	
178	12.500	27.70	.1	.0	.0	4.03	4.39	4.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.43	
179	12.400	27.76	.1	.0	.0	4.02	4.30	4.30	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.35	
180	12.300	27.81	.1	.0	.0	4.01	4.20	4.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.28	
181	12.200	27.86	.1	.0	.0	4.01	4.11	4.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.21	
182	12.100	27.91	.1	.0	.0	4.00	4.02	4.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.14	
183	12.000	27.97	.1	.0	.0	3.99	3.94	3.94	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.07	
184	11.900	28.02	.1	.0	.0	3.98	3.85	3.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.00	
185	11.800	28.07	.1	.0	.0	3.97	3.77	3.77	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.93	
186	11.700	28.13	.1	.0	.0	3.97	3.69	3.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.86	
187	11.600	28.18	.1	.0	.0	3.96	3.61	3.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.79	
188	11.500	28.23	.1	.0	.0	3.95	3.54	3.54	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.72	
189	11.400	28.29	.1	.0	.0	3.94	3.48	3.48	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.65	
190	11.300	28.34	.1	.0	.0	3.94	3.45	3.45	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.57	
191	11.200	28.39	.1	.0	.0	3.96	3.49	3.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.46	
192	11.100	28.45	.1	.0	.0	4.05	3.72	3.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.26	
193	11.000	28.50	.1	.0	.0	4.36	4.51	4.51	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.83	

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L
 1
 FINAL REPORT SILLS GULLY
 REACH NO. 12 BAYOU WIKOFF TO BPS
 BAYOU PLAQUEMINE BRUIE WATERSHED
 CALIBRATION RUN
 REACH INPUTS

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM	MEAN VELO M/S
194	UPR RCH	.0244	28.50	.11	.0	.0	4.36	4.51	4.51	.00	1.00	1.00	1.00	.0	0.	0.	3.83
EACH INCR		.0100	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	0.	6.80
194	WSTLD	.0783	.00	.00	.0	.0	4.80	9.50	9.50	.00	.00	.00	.00	.0	0.	0.	1.70

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
194	11.00	10.00	.1127	75.1	.049	.24	.29	7.9	2318.	7928.7	2.3	0.	.000	3.235	.049
195	10.00	9.00	.1227	69.0	.050	.23	.30	8.2	2433.	8231.9	2.4	0.	.000	3.386	.050
196	9.00	8.00	.1327	63.8	.052	.22	.30	8.5	2544.	8519.3	2.5	0.	.000	3.532	.052
197	8.00	7.00	.1427	59.3	.054	.22	.30	8.8	2652.	8792.8	2.7	0.	.000	3.674	.054
198	7.00	6.00	.1527	55.5	.055	.21	.30	9.1	2756.	9053.8	2.8	0.	.000	3.812	.055
199	6.00	5.00	.1627	52.0	.057	.20	.31	9.3	2858.	9303.5	2.9	0.	.000	3.947	.057
200	5.00	4.00	.1727	49.0	.058	.20	.31	9.5	2957.	9543.1	3.0	0.	.000	4.078	.058
201	4.00	3.00	.1827	46.3	.060	.19	.31	9.8	3053.	9773.5	3.1	0.	.000	4.207	.060

1
 STREAM SUMMARY
 STILLS GULLY
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

TRAVEL TIME = 5.0 DAYS
 MAXIMUM EFFLUENT = 75.1 PERCENT

FLOW = .0159 TO .2127 GMS
 DISPERSION = .8967 TO 4.5779 SQ M/S
 VELOCITY = .0159 TO .0639 M/S
 DEPTH = .24 TO .32 M
 WIDTH = 3.7 TO 10.4 M
 BOD DECAY = .17 TO .19 PER DAY
 NH3 DECAY = .00 TO .00 PER DAY
 SDMNT OXYGEN DEMND = 1.99 TO 4.10 G/SQ M/D
 NH3 SOURCE = .00 TO .00 G/SQ M/D
 REAERATION = 4.17 TO 5.77 PER DAY
 ROD SETTLING = .13 TO .26 PER DAY
 ORGN DECAY = .00 TO .00 PER DAY
 ORGN SETTLING = .00 TO .00 PER DAY
 TEMPERATURE = 26.00 TO 28.50 DEG C
 DISSOLVED OXYGEN = 3.94 TO 6.35 MG/L

1
 FINAL REPORT CROWLEY HIGH GULLY
 REACH NO. 14 CROWLEY HIGH TO BRP
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCH *
209	HDWTR	.0000	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
EACH	INCR	.0000	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
209	WSTLD	.0010	.00	.00	.0	.0	2.00	75.90	75.90	.00	.00	.00	.00	.0	0.	64.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
209	1.90	1.80	.0011	97.1	.002	.69	.21	3.0	64.	304.2	.6	0.	.000	.085	.002
210	1.80	1.70	.0011	94.3	.002	.68	.21	3.1	65.	309.1	.7	0.	.000	.087	.002
211	1.70	1.60	.0011	91.7	.002	.67	.21	3.1	67.	314.0	.7	0.	.000	.088	.002
212	1.60	1.50	.0012	89.3	.002	.67	.21	3.2	68.	318.8	.7	0.	.000	.089	.002
213	1.50	1.40	.0012	86.9	.002	.66	.21	3.2	69.	323.5	.7	0.	.000	.090	.002
214	1.40	1.30	.0012	84.7	.002	.66	.21	3.3	70.	328.1	.7	0.	.000	.091	.002
215	1.30	1.20	.0013	82.6	.002	.65	.21	3.3	71.	332.7	.7	0.	.000	.092	.002
216	1.20	1.10	.0013	80.6	.002	.64	.21	3.4	72.	337.2	.7	0.	.000	.093	.002

217	1.10	1.00	.0013	78.7	.002	.64	.22	3.4	74.	341.7	.7	0.	.000	.093	.002
218	1.00	.90	.0014	76.9	.002	.63	.22	3.5	75.	346.1	.7	0.	.000	.094	.002
219	.90	.80	.0014	75.1	.002	.63	.22	3.5	76.	350.5	.8	0.	.000	.095	.002
220	.80	.70	.0014	73.5	.002	.62	.22	3.5	77.	354.8	.8	0.	.000	.096	.002
221	.70	.60	.0015	71.9	.002	.62	.22	3.6	78.	359.1	.9	0.	.000	.097	.002
222	.60	.50	.0015	70.4	.002	.61	.22	3.6	79.	363.4	.8	0.	.000	.098	.002
223	.50	.40	.0015	68.9	.002	.61	.22	3.7	80.	367.5	.8	0.	.000	.099	.002
224	.40	.30	.0016	67.5	.002	.61	.22	3.7	81.	371.7	.8	0.	.000	.100	.002
225	.30	.20	.0016	66.2	.002	.60	.22	3.8	83.	375.8	.8	0.	.000	.101	.002
226	.20	.10	.0016	64.9	.002	.60	.22	3.8	84.	379.8	.8	0.	.000	.102	.002
227	.10	.00	.0017	63.6	.002	.59	.22	3.8	85.	383.9	.8	0.	.000	.103	.002
TOT						12.09	.22	3.5	1418.	6562.0	.7				
AVG						12.09									
CUM															

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAFR RATE L/DA	CBOD DECAY I/DA	CROD SETT I/DA	AMBOD DECAY I/DA	FULL SOD +	CORR SOD +	ORGN DECAY I/DA	ORGN SETT I/DA	NH3 DECAY I/DA	NH3 SRCE +	DENIT RATE I/DA	PO4 SRCE +	ALG PROD **	MAC PROD **	COLI DECAY I/DA	NCH DECAY I/DA	NCM SETT I/DA	
209	1.800	7.74	3.70	.07	.26	.00	4.12	4.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
210	1.700	7.73	3.70	.06	.26	.00	4.14	4.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
211	1.600	7.72	3.71	.07	.26	.00	4.16	4.16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
212	1.500	7.71	3.71	.08	.26	.00	4.18	4.18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
213	1.400	7.70	3.72	.09	.26	.00	4.20	4.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
214	1.300	7.69	3.72	.10	.26	.00	4.22	4.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
215	1.200	7.68	3.73	.11	.26	.00	4.24	4.24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
216	1.100	7.67	3.73	.12	.26	.00	4.27	4.27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
217	1.000	7.66	3.74	.13	.26	.00	4.29	4.29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
218	.900	7.65	3.74	.14	.25	.00	4.31	4.31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
219	.800	7.64	3.75	.15	.25	.00	4.33	4.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
220	.700	7.63	3.75	.15	.25	.00	4.35	4.35	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
221	.600	7.62	3.76	.16	.25	.00	4.37	4.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	
222	.500	7.61	3.77	.17	.25	.00	4.42	4.42	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	
223	.400	7.60	3.77	.17	.25	.00	4.42	4.42	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	
224	.300	7.59	3.77	.17	.25	.00	4.44	4.44	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	
225	.200	7.57	3.78	.18	.25	.00	4.46	4.46	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	
226	.100	7.56	3.78	.19	.25	.00	4.48	4.48	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	
227	.000	7.55	3.79	.21	.25	.00	4.51	4.51	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05	
20 DEG C RATE				.13	.25	.00		2.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.91		
AVG 20 DEG C RATE			3.15																.25	

* G/SQ M/D ** MG/L/DA

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MAGRO **	COLI #/100ML	NCM *
209	1.800	28.58	.1	.0	.0	.67	57.07	57.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	54.41
210	1.700	28.66	.1	.0	.0	.60	47.19	47.19	.00	1.00	1.00	2.00	1.00	.0	.0	0.	48.55
211	1.600	28.74	.1	.0	.0	.68	39.10	39.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	43.39
212	1.500	28.82	.1	.0	.0	.79	32.44	32.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	38.84
213	1.400	28.89	.1	.0	.0	.89	26.96	26.96	.00	1.00	1.00	2.00	1.00	.0	.0	0.	34.82
214	1.300	28.97	.1	.0	.0	1.00	22.46	22.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	31.26
215	1.200	29.05	.1	.0	.0	1.10	18.78	18.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	28.10
216	1.100	29.13	.1	.0	.0	1.20	15.78	15.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	25.30
217	1.000	29.21	.1	.0	.0	1.29	13.33	13.33	.00	1.00	1.00	2.00	1.00	.0	.0	0.	22.82
218	.900	29.29	.1	.0	.0	1.37	11.35	11.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.60
219	.800	29.37	.1	.0	.0	1.45	9.74	9.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.63
220	.700	29.45	.1	.0	.0	1.51	8.44	8.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.87
221	.600	29.53	.1	.0	.0	1.57	7.39	7.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.29
222	.500	29.61	.1	.0	.0	1.62	6.54	6.54	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.88
223	.400	29.68	.1	.0	.0	1.66	5.85	5.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.61
224	.300	29.76	.1	.0	.0	1.69	5.31	5.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.44
225	.200	29.84	.1	.0	.0	1.74	4.91	4.91	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.29
226	.100	29.92	.1	.0	.0	1.87	4.76	4.76	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.95
227	.000	30.00	.1	.0	.0	2.82	5.27	5.27	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.79

* CM-I = CHLORIDES MG/L
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

1
 STREAM SUMMARY
 CROWLEY HIGH GULLY
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

TRAVEL TIME = 12.1 DAYS

MAXIMUM EFFLUENT = 97.1 PERCENT

FLOW	=	.0011	TO	.0017	GMS
DISPERSION	=	.0854	TO	.1025	SQ M/S
VELOCITY	=	.0017	TO	.0019	M/S
DEPTH	=	.21	TO	.22	M
WIDTH	=	3.0	TO	3.8	M
BOD DECAY	=	.06	TO	.21	PER DAY
NH3 DECAY	=	.00	TO	.00	PER DAY
SDMNT OXYGEN DMND	=	4.12	TO	4.51	G/SQ M/D
NH3 SOURCE	=	.00	TO	.00	G/SQ M/D
REAERATION	=	3.70	TO	3.79	PER DAY
BOD SETTLING	=	.25	TO	.26	PER DAY
ORGN DECAY	=	.00	TO	.00	PER DAY
ORGN SETTLING	=	.00	TO	.00	PER DAY
TEMPERATURE	=	28.58	TO	30.00	DEG C
DISSOLVED OXYGEN	=	.60	TO	2.82	MG/L

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCH
287	HDWTR	.0181	.00	.00	.0	.0	5.30	13.69	13.69	.00	.00	.00	.00	.0	0.	11.77
EACH INCR		.0007	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
287	WSTLD	.0566	.00	.00	.0	.0	4.20	28.40	28.40	.00	.00	.00	.00	.0	0.	44.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
287	25.70	25.60	.0755	75.0	.105	.01	.21	3.5	72.	349.5	.7	0.	.000	5.212	.105
288	25.60	25.50	.0762	74.3	.106	.01	.21	3.5	72.	351.3	.7	0.	.000	5.233	.106
289	25.50	25.40	.0769	73.7	.106	.01	.21	3.5	73.	353.2	.7	0.	.000	5.253	.106
290	25.40	25.30	.0776	73.0	.106	.01	.21	3.5	73.	355.0	.7	0.	.000	5.273	.106
291	25.30	25.20	.0783	72.4	.107	.01	.21	3.6	73.	356.8	.7	0.	.000	5.293	.107
292	25.20	25.10	.0790	71.7	.107	.01	.21	3.6	74.	358.5	.7	0.	.000	5.313	.107
293	25.10	25.00	.0797	71.1	.107	.01	.21	3.6	74.	360.3	.7	0.	.000	5.333	.107
294	25.00	24.90	.0804	70.5	.107	.01	.21	3.6	75.	362.1	.7	0.	.000	5.352	.107
295	24.90	24.80	.0811	69.9	.108	.01	.21	3.6	75.	363.9	.8	0.	.000	5.372	.108
296	24.80	24.70	.0818	69.3	.108	.01	.21	3.7	76.	365.6	.8	0.	.000	5.392	.108
297	24.70	24.60	.0825	68.7	.108	.01	.21	3.7	76.	367.4	.8	0.	.000	5.411	.108
298	24.60	24.50	.0832	68.1	.109	.01	.21	3.7	76.	369.1	.8	0.	.000	5.430	.109
299	24.50	24.40	.0839	67.5	.109	.01	.21	3.7	77.	370.9	.8	0.	.000	5.450	.109
300	24.40	24.30	.0846	67.0	.109	.01	.21	3.7	77.	372.6	.8	0.	.000	5.469	.109
301	24.30	24.20	.0853	66.4	.110	.01	.21	3.8	78.	374.3	.8	0.	.000	5.488	.110
302	24.20	24.10	.0860	65.9	.110	.01	.21	3.8	78.	376.0	.8	0.	.000	5.507	.110
303	24.10	24.00	.0867	65.3	.110	.01	.21	3.8	79.	377.7	.8	0.	.000	5.526	.110
304	24.00	23.90	.0874	64.8	.111	.01	.21	3.8	79.	379.5	.8	0.	.000	5.545	.111
305	23.90	23.80	.0881	64.3	.111	.01	.21	3.8	79.	381.1	.8	0.	.000	5.564	.111
306	23.80	23.70	.0888	63.8	.111	.01	.21	3.8	79.	382.8	.8	0.	.000	5.582	.111
307	23.70	23.60	.0895	63.3	.111	.01	.21	3.8	80.	384.5	.8	0.	.000	5.601	.111
308	23.60	23.50	.0902	62.8	.112	.01	.21	3.9	81.	386.2	.8	0.	.000	5.620	.112
309	23.50	23.40	.0909	62.3	.112	.01	.21	3.9	81.	387.9	.8	0.	.000	5.638	.112
310	23.40	23.30	.0916	61.8	.112	.01	.21	3.9	81.	389.5	.8	0.	.000	5.656	.112
311	23.30	23.20	.0923	61.4	.113	.01	.21	3.9	82.	391.2	.8	0.	.000	5.675	.113
TOT AVG CUM					.109	.27	.21	3.7	1922.	9267.0	.8				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. M3/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD +	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA	
287	25.600	7.75	3.64	.07	.26	.00	5.14	5.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.03	
288	25.500	7.74	3.64	.07	.26	.00	5.15	5.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.03	
289	25.400	7.74	3.64	.07	.26	.00	5.16	5.16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.03	
290	25.300	7.73	3.64	.07	.26	.00	5.18	5.18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.03	
291	25.200	7.73	3.65	.07	.26	.00	5.19	5.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
292	25.100	7.72	3.65	.07	.26	.00	5.20	5.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
293	25.000	7.72	3.65	.07	.26	.00	5.21	5.21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
294	24.900	7.71	3.65	.07	.26	.00	5.23	5.23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
295	24.800	7.70	3.66	.08	.26	.00	5.24	5.24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
296	24.700	7.70	3.66	.08	.26	.00	5.25	5.25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
297	24.600	7.69	3.66	.08	.26	.00	5.27	5.27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
298	24.500	7.69	3.66	.08	.26	.00	5.28	5.28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
299	24.400	7.68	3.67	.08	.26	.00	5.29	5.29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
300	24.300	7.68	3.67	.08	.26	.00	5.31	5.31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
301	24.200	7.67	3.67	.08	.26	.00	5.32	5.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
302	24.100	7.67	3.67	.08	.26	.00	5.33	5.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
303	24.000	7.66	3.68	.07	.26	.00	5.35	5.35	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
304	23.900	7.66	3.68	.07	.26	.00	5.36	5.36	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
305	23.800	7.65	3.68	.07	.26	.00	5.38	5.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
306	23.700	7.65	3.68	.06	.26	.00	5.39	5.39	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
307	23.600	7.64	3.69	.06	.26	.00	5.40	5.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
308	23.500	7.64	3.69	.06	.26	.00	5.42	5.42	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
309	23.400	7.63	3.69	.06	.26	.00	5.43	5.43	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
310	23.300	7.62	3.69	.06	.26	.00	5.44	5.44	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
311	23.200	7.62	3.70	.07	.26	.00	5.46	5.46	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.03	
20 DEG C RATE																				
AVG 20 DEG C RATE			3.10		.05	.26	.00	3.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	13.03	.15

+ G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MAGRO **	COLI #/100ML	NCM *
287	25.600	28.54	.1	.0	.0	4.15	24.42	24.42	.00	1.00	1.00	2.00	1.00	.0	.0	0.	36.03
288	25.500	28.58	.1	.0	.0	3.95	24.15	24.15	.00	1.00	1.00	2.00	1.00	.0	.0	0.	35.68
289	25.400	28.62	.1	.0	.0	3.76	23.88	23.88	.00	1.00	1.00	2.00	1.00	.0	.0	0.	35.34
290	25.300	28.66	.1	.0	.0	3.58	23.63	23.63	.00	1.00	1.00	2.00	1.00	.0	.0	0.	35.01
291	25.200	28.70	.1	.0	.0	3.41	23.37	23.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	34.68
292	25.100	28.74	.1	.0	.0	3.24	23.12	23.12	.00	1.00	1.00	2.00	1.00	.0	.0	0.	34.35
293	25.000	28.78	.1	.0	.0	3.09	22.88	22.88	.00	1.00	1.00	2.00	1.00	.0	.0	0.	34.04
294	24.900	28.82	.1	.0	.0	2.94	22.64	22.64	.00	1.00	1.00	2.00	1.00	.0	.0	0.	33.73
295	24.800	28.86	.1	.0	.0	2.80	22.40	22.40	.00	1.00	1.00	2.00	1.00	.0	.0	0.	33.42
296	24.700	28.90	.1	.0	.0	2.66	22.17	22.17	.00	1.00	1.00	2.00	1.00	.0	.0	0.	33.12
297	24.600	28.94	.1	.0	.0	2.53	21.95	21.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	32.82
298	24.500	28.98	.1	.0	.0	2.41	21.72	21.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	32.53

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE *	NH3 DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA	
316	22.700	7.57	3.13	.14	.16	.00	1.86	1.86	.00	.00	.00	.00	.00	.00	.00	21.47	.00	.28	.28	.03
317	22.600	7.52	3.15	.14	.16	.00	1.91	1.91	.00	.00	.00	.00	.00	.00	.00	17.19	.00	.28	.29	.03
318	22.500	7.47	3.17	.15	.16	.00	1.95	1.95	.00	.00	.00	.00	.00	.00	.00	12.75	.00	.30	.30	.03
319	22.400	7.42	3.19	.15	.16	.00	2.00	2.00	.00	.00	.00	.00	.00	.00	.00	8.15	.00	.31	.31	.03
320	22.300	7.37	3.22	.15	.16	.00	2.05	2.05	.00	.00	.00	.00	.00	.00	.00	3.38	.00	.31	.31	.03
20	DEG C RATE			.09				1.00	.00	.00	.00	.00	.00	.00	.00		.00	22.19		.10
AVG 20	DEG C RATE		2.61						.16											

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	FBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
316	22.700	29.88	.1	.0	.0	7.58	14.69	14.69	.00	1.00	1.00	2.00	1.00	272.8	.0	0.	22.33
317	22.600	30.26	.1	.0	.0	7.63	14.03	14.03	.00	1.00	1.00	2.00	1.00	214.6	.0	0.	21.29
318	22.500	30.64	.1	.0	.0	7.28	13.42	13.42	.00	1.00	1.00	2.00	1.00	156.4	.0	0.	20.31
319	22.400	31.02	.1	.0	.0	6.69	12.88	12.88	.00	1.00	1.00	2.00	1.00	98.2	.0	0.	19.42
320	22.300	31.40	.1	.0	.0	6.05	12.49	12.49	.00	1.00	1.00	2.00	1.00	40.0	.0	0.	18.70

* CM-I = CHLORIDES MG/L
 ** G/CU M.
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

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 FINAL REPORT BAYOU BLANC
 REACH NO. 20 LAKE TO RK 6.4
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
321	UPR RCH	-1.004	31.40	.13	.0	.0	6.05	12.49	12.49	.00	1.00	1.00	1.00	40.0	0.	18.70
EACH	INCR	.0001	.00	.00	.0	.0	4.89	4.63	4.63	.00	1.00	1.00	1.00	.00	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
321	22.30	22.00	.1004	56.4	.037	.09	.50	5.4	812.	1624.0	2.7	0.	.000	3.860	.037
322	22.00	21.70	.1005	56.3	.037	.09	.50	5.4	812.	1624.4	2.7	0.	.000	3.861	.037
323	21.70	21.40	.1006	56.3	.037	.09	.50	5.4	812.	1624.8	2.7	0.	.000	3.863	.037

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL COR		ORGN		NH3		DENT		ALG		MAC		COLI DECAY 1/DA	NGM DECAY 1/DA	NGM SETT 1/DA
							SOD *	SOD *	DECAY 1/DA	SETT 1/DA	DECAY 1/DA	SRCE *	RATE 1/DA	SRCE *	PROD **	PROD **					
321	22.000	7.38	2.94	.10	.00	.00	2.05	2.05	.00	.00	.00	.00	.00	.00	3.31	.00	.00	.00	.00	.33	.00
322	21.700	7.38	2.94	.10	.00	.00	2.04	2.04	.00	.00	.00	.00	.00	.00	3.24	.00	.00	.00	.00	.33	.00
323	21.400	7.38	2.94	.10	.00	.00	2.04	2.04	.00	.00	.00	.00	.00	.00	3.17	.00	.00	.00	.00	.32	.00
324	21.100	7.39	2.94	.10	.00	.00	2.04	2.04	.00	.00	.00	.00	.00	.00	3.11	.00	.00	.00	.00	.32	.00
325	20.800	7.39	2.94	.10	.00	.00	2.03	2.03	.00	.00	.00	.00	.00	.00	3.04	.00	.00	.00	.00	.32	.00
326	20.500	7.39	2.94	.10	.00	.00	2.03	2.03	.00	.00	.00	.00	.00	.00	2.97	.00	.00	.00	.00	.32	.00
327	20.200	7.40	2.94	.10	.00	.00	2.03	2.03	.00	.00	.00	.00	.00	.00	2.91	.00	.00	.00	.00	.32	.00
328	19.900	7.40	2.93	.10	.00	.00	2.02	2.02	.00	.00	.00	.00	.00	.00	2.84	.00	.00	.00	.00	.32	.00
329	19.600	7.40	2.93	.10	.00	.00	2.02	2.02	.00	.00	.00	.00	.00	.00	2.77	.00	.00	.00	.00	.32	.00
330	19.300	7.41	2.93	.10	.00	.00	2.02	2.02	.00	.00	.00	.00	.00	.00	2.71	.00	.00	.00	.00	.32	.00
331	19.000	7.41	2.93	.10	.00	.00	2.01	2.01	.00	.00	.00	.00	.00	.00	2.64	.00	.00	.00	.00	.32	.00
332	18.700	7.41	2.93	.10	.00	.00	2.01	2.01	.00	.00	.00	.00	.00	.00	2.57	.00	.00	.00	.00	.32	.00
333	18.400	7.42	2.93	.10	.00	.00	2.01	2.01	.00	.00	.00	.00	.00	.00	2.51	.00	.00	.00	.00	.32	.00
334	18.100	7.42	2.93	.10	.00	.00	2.00	2.00	.00	.00	.00	.00	.00	.00	2.44	.00	.00	.00	.00	.32	.00
335	17.800	7.42	2.92	.10	.00	.00	2.00	2.00	.00	.00	.00	.00	.00	.00	2.38	.00	.00	.00	.00	.32	.00
336	17.500	7.43	2.92	.10	.00	.00	2.00	2.00	.00	.00	.00	.00	.00	.00	2.31	.00	.00	.00	.00	.32	.00
337	17.200	7.43	2.92	.10	.00	.00	1.99	1.99	.00	.00	.00	.00	.00	.00	2.25	.00	.00	.00	.00	.32	.00
338	16.900	7.43	2.92	.10	.00	.00	1.99	1.99	.00	.00	.00	.00	.00	.00	2.18	.00	.00	.00	.00	.32	.00
339	16.600	7.44	2.92	.10	.00	.00	1.98	1.98	.00	.00	.00	.00	.00	.00	2.12	.00	.00	.00	.00	.32	.00
340	16.300	7.44	2.92	.10	.00	.00	1.98	1.98	.00	.00	.00	.00	.00	.00	2.05	.00	.00	.00	.00	.32	.00
341	16.000	7.44	2.92	.10	.00	.00	1.98	1.98	.00	.00	.00	.00	.00	.00	1.99	.00	.00	.00	.00	.31	.00
342	15.700	7.45	2.92	.10	.00	.00	1.98	1.98	.00	.00	.00	.00	.00	.00	1.92	.00	.00	.00	.00	.31	.00
343	15.400	7.45	2.91	.10	.00	.00	1.97	1.97	.00	.00	.00	.00	.00	.00	1.86	.00	.00	.00	.00	.31	.00
344	15.100	7.45	2.91	.10	.00	.00	1.97	1.97	.00	.00	.00	.00	.00	.00	1.79	.00	.00	.00	.00	.31	.00
345	14.800	7.46	2.91	.10	.00	.00	1.97	1.97	.00	.00	.00	.00	.00	.00	1.73	.00	.00	.00	.00	.31	.00
346	14.500	7.46	2.91	.10	.00	.00	1.96	1.96	.00	.00	.00	.00	.00	.00	1.67	.00	.00	.00	.00	.31	.00
347	14.200	7.46	2.91	.10	.00	.00	1.96	1.96	.00	.00	.00	.00	.00	.00	1.60	.00	.00	.00	.00	.31	.00
348	13.900	7.47	2.91	.10	.00	.00	1.95	1.95	.00	.00	.00	.00	.00	.00	1.54	.00	.00	.00	.00	.31	.00
349	13.600	7.47	2.91	.10	.00	.00	1.95	1.95	.00	.00	.00	.00	.00	.00	1.48	.00	.00	.00	.00	.31	.00
350	13.300	7.47	2.90	.10	.00	.00	1.95	1.95	.00	.00	.00	.00	.00	.00	1.41	.00	.00	.00	.00	.31	.00
351	13.000	7.48	2.90	.10	.00	.00	1.95	1.94	.00	.00	.00	.00	.00	.00	1.35	.00	.00	.00	.00	.31	.00
352	12.700	7.48	2.90	.10	.00	.00	1.94	1.94	.00	.00	.00	.00	.00	.00	1.29	.00	.00	.00	.00	.31	.00
353	12.400	7.48	2.90	.10	.00	.00	1.94	1.94	.00	.00	.00	.00	.00	.00	1.22	.00	.00	.00	.00	.31	.00
354	12.100	7.49	2.90	.10	.00	.00	1.94	1.94	.00	.00	.00	.00	.00	.00	1.16	.00	.00	.00	.00	.31	.00
355	11.800	7.49	2.90	.10	.00	.00	1.93	1.93	.00	.00	.00	.00	.00	.00	1.10	.00	.00	.00	.00	.31	.00
356	11.500	7.50	2.90	.10	.00	.00	1.93	1.93	.00	.00	.00	.00	.00	.00	1.04	.00	.00	.00	.00	.31	.00
357	11.200	7.50	2.90	.10	.00	.00	1.93	1.93	.00	.00	.00	.00	.00	.00	.97	.00	.00	.00	.00	.31	.00
358	10.900	7.50	2.89	.10	.00	.00	1.92	1.92	.00	.00	.00	.00	.00	.00	.91	.00	.00	.00	.00	.30	.00
359	10.600	7.51	2.89	.10	.00	.00	1.92	1.92	.00	.00	.00	.00	.00	.00	.85	.00	.00	.00	.00	.30	.00
360	10.300	7.51	2.89	.10	.00	.00	1.92	1.92	.00	.00	.00	.00	.00	.00	.79	.00	.00	.00	.00	.30	.00
361	10.000	7.51	2.89	.10	.00	.00	1.91	1.91	.00	.00	.00	.00	.00	.00	.73	.00	.00	.00	.00	.30	.00
362	9.700	7.52	2.89	.10	.00	.00	1.91	1.91	.00	.00	.00	.00	.00	.00	.67	.00	.00	.00	.00	.30	.00
363	9.400	7.52	2.89	.10	.00	.00	1.91	1.91	.00	.00	.00	.00	.00	.00	.60	.00	.00	.00	.00	.30	.00
364	9.100	7.52	2.89	.10	.00	.00	1.91	1.91	.00	.00	.00	.00	.00	.00	.54	.00	.00	.00	.00	.30	.00
365	8.800	7.53	2.89	.10	.00	.00	1.90	1.90	.00	.00	.00	.00	.00	.00	.48	.00	.00	.00	.00	.30	.00
366	8.500	7.53	2.88	.10	.00	.00	1.90	1.90	.00	.00	.00	.00	.00	.00	.42	.00	.00	.00	.00	.30	.00
367	8.200	7.53	2.88	.10	.00	.00	1.90	1.90	.00	.00	.00	.00	.00	.00	.36	.00	.00	.00	.00	.30	.00
368	7.900	7.54	2.88	.10	.00	.00	1.89	1.89	.00	.00	.00	.00	.00	.00	.30	.00	.00	.00	.00	.30	.00
369	7.600	7.54	2.88	.10	.00	.00	1.89	1.89	.00	.00	.00	.00	.00	.00	.24	.00	.00	.00	.00	.30	.00

360	10.300	30.34	.1	.0	.0	5.52	8.55	8.55	.00	1.00	1.00	2.00	1.00	9.8	.0	0.	5.92
361	10.000	30.32	.1	.0	.0	5.53	8.48	8.48	.00	1.00	1.00	2.00	1.00	9.1	.0	0.	5.76
362	9.700	30.29	.1	.0	.0	5.54	8.40	8.40	.00	1.00	1.00	2.00	1.00	8.3	.0	0.	5.61
363	9.400	30.26	.1	.0	.0	5.54	8.32	8.32	.00	1.00	1.00	2.00	1.00	7.5	.0	0.	5.46
364	9.100	30.24	.1	.0	.0	5.55	8.25	8.25	.00	1.00	1.00	2.00	1.00	6.8	.0	0.	5.31
365	8.800	30.21	.1	.0	.0	5.55	8.17	8.17	.00	1.00	1.00	2.00	1.00	6.0	.0	0.	5.17
366	8.500	30.18	.1	.0	.0	5.56	8.10	8.10	.00	1.00	1.00	2.00	1.00	5.3	.0	0.	5.03
367	8.200	30.16	.1	.0	.0	5.56	8.03	8.03	.00	1.00	1.00	2.00	1.00	4.5	.0	0.	4.90
368	7.900	30.13	.1	.0	.0	5.56	7.95	7.95	.00	1.00	1.00	2.00	1.00	3.8	.0	0.	4.77
369	7.600	30.11	.1	.0	.0	5.56	7.87	7.87	.00	1.00	1.00	2.00	1.00	3.0	.0	0.	4.64
370	7.300	30.08	.1	.0	.0	5.55	7.78	7.78	.00	1.00	1.00	2.00	1.00	2.3	.0	0.	4.52
371	7.000	30.05	.1	.0	.0	5.51	7.61	7.61	.00	1.00	1.00	2.00	1.00	1.5	.0	0.	4.39
372	6.700	30.03	.1	.0	.0	5.27	7.16	7.16	.00	1.00	1.00	2.00	1.00	.8	.0	0.	4.25
373	6.400	30.00	.1	.0	.0	4.10	5.61	5.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.05

* CM-I = CHLORIDES MG/L
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

** G/CU M
 1
 FINAL REPORT BAYOU BLANC
 REACH NO. 21 RK 6.4 TO BBB
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
374	UPR RCH	.1038	30.00	.13	.0	.0	4.10	5.61	5.61	.00	1.00	1.00	1.00	1.00	0.	4.05
EACH	INCR	.0005	.00	.00	.0	.0	4.89	4.63	4.63	.00	1.00	1.00	1.00	.00	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	REGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
374	6.40	6.00	.1043	54.3	.004	1.27	1.43	20.0	11429.	7992.0	28.6	474.	.000	8.000	.004
375	6.00	5.60	.1047	54.1	.004	1.26	1.43	20.0	11429.	7992.0	28.6	948.	.001	8.000	.004
376	5.60	5.20	.1052	53.8	.004	1.26	1.43	20.0	11429.	7992.0	28.6	1421.	.001	8.000	.004
377	5.20	4.80	.1057	53.6	.004	1.25	1.43	20.0	11429.	7992.0	28.6	1895.	.001	8.000	.004
378	4.80	4.40	.1062	53.3	.004	1.25	1.43	20.0	11429.	7992.0	28.6	2369.	.002	8.000	.004
379	4.40	4.00	.1067	53.1	.004	1.24	1.43	20.0	11429.	7992.0	28.6	2843.	.002	8.000	.004
380	4.00	3.60	.1072	52.8	.004	1.23	1.43	20.0	11429.	7992.0	28.6	3316.	.003	8.000	.004
381	3.60	3.20	.1077	52.6	.004	1.23	1.43	20.0	11429.	7992.0	28.6	3790.	.003	8.000	.004
382	3.20	2.80	.1082	52.4	.004	1.22	1.43	20.0	11429.	7992.0	28.6	4264.	.003	8.000	.004
383	2.80	2.40	.1086	52.1	.004	1.22	1.43	20.0	11429.	7992.0	28.6	4738.	.004	8.000	.005
384	2.40	2.00	.1091	51.9	.004	1.21	1.43	20.0	11429.	7992.0	28.6	5211.	.004	8.000	.005
385	2.00	1.60	.1096	51.7	.004	1.21	1.43	20.0	11429.	7992.0	28.6	5685.	.004	8.000	.005
386	1.60	1.20	.1101	51.4	.004	1.20	1.43	20.0	11429.	7992.0	28.6	6159.	.005	8.000	.005
387	1.20	.80	.1106	51.2	.004	1.20	1.43	20.0	11429.	7992.0	28.6	6633.	.005	8.000	.006
388	.80	.40	.1111	51.0	.004	1.19	1.43	20.0	11429.	7992.0	28.6	7106.	.006	8.000	.006
389	.40	.00	.1116	50.8	.004	1.19	1.43	20.0	11429.	7992.0	28.6	7580.	.006	8.000	.006
TOT AVG CUM					.004	19.62	1.43	20.0	182857.	127872.1	28.6				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST KM	SAT D.O. MG/L	REAER RATE 1/DA	GBOD DECY 1/DA	GBOD SETT 1/DA	ANBOD DECY 1/DA	FULL SOD *	CORR SOD *	ORGN DECY 1/DA	ORGN SETT 1/DA	NH3 DECY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA
374	6.000	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
375	5.600	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
376	5.200	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
377	4.800	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
378	4.400	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
379	4.000	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
380	3.600	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
381	3.200	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
382	2.800	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
383	2.400	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
384	2.000	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
385	1.600	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
386	1.200	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
387	.800	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
388	.400	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
389	.000	7.55	.60	.14	.00	.00	1.88	1.88	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.00
20 DEG C RATE					.09		1.00		.00	.00	.00	.00	.00	.00			.00	21.39	.00
AVG 20 DEG C RATE					.50				.00	.00	.00	.00	.00	.00					

* G/SQ M/D

** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MAGRO **	COLI #/100ML	NCM *
374	6.000	30.00	.1	.0	.0	3.56	5.06	5.06	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.01
375	5.600	30.00	.1	.0	.0	3.28	4.71	4.71	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.99
376	5.200	30.00	.1	.0	.0	4.39	4.39	4.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.97
377	4.800	30.00	.1	.0	.0	2.95	4.12	4.12	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.97
378	4.400	30.00	.1	.0	.0	2.86	3.87	3.87	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.98
379	4.000	30.00	.1	.0	.0	2.79	3.66	3.66	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.00
380	3.600	30.00	.1	.0	.0	2.73	3.48	3.48	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.04
381	3.200	30.00	.1	.0	.0	2.68	3.33	3.33	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.10
382	2.800	30.00	.1	.0	.0	2.64	3.21	3.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.19
383	2.400	30.00	.1	.0	.0	2.59	3.11	3.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.33
384	2.000	30.00	.1	.0	.0	2.54	3.06	3.06	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.54
385	1.600	30.00	.1	.0	.0	2.48	3.04	3.04	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.83
386	1.200	30.00	.1	.0	.0	2.44	3.06	3.06	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.25
387	.800	30.00	.1	.0	.0	2.44	3.14	3.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.85
388	.400	30.00	.1	.0	.0	2.52	3.28	3.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.70
389	.000	30.00	.1	.0	.0	2.78	3.51	3.51	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.92

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

1
 STREAM SUMMARY
 BAYOU BLANC
 BAYOU PLAQUEMINNE BRULE WATERSHED
 CALIBRATION RUN

TRAVEL TIME	=	26.1 DAYS
MAXIMUM EFFLUENT	=	75.0 PERCENT
FLOW	=	.0755 TO .1116 CMS
DISPERSION	=	.5383 TO 8.0000 SQ M/S
VELOCITY	=	.0036 TO .1127 M/S
DEPTH	=	.21 TO 1.43 M
WIDTH	=	3.5 TO 39.2 M
BOD DECAY	=	.06 TO .15 PER DAY
NH3 DECAY	=	.00 TO .00 PER DAY
SMNT OXYGEN DEMD	=	1.82 TO 5.46 G/SQ M/D
NH3 SOURCE	=	.00 TO .00 G/SQ M/D
REAERATION	=	.60 TO 3.70 PER DAY
BOD SETTLING	=	.00 TO .26 PER DAY
ORGN DECAY	=	.00 TO .00 PER DAY
ORGN SETTLING	=	.00 TO .00 PER DAY
TEMPERATURE	=	28.54 TO 31.40 DEG C
DISSOLVED OXYGEN	=	1.46 TO 7.63 MG/L

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	MH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A US/L	COLI #/100ML	NCM *
395	HDWTR	.0092	.00	.00	.0	.0	4.80	9.49	9.49	.00	.00	.00	.00	.0	0.	1.73
EACH INCR		.0000	.00	.00	.0	.0	4.89	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
395	WSTLTD	.0038	.00	.00	.0	.0	.00	9.93	9.93	.00	3.47	.00	.00	.0	0.	19.40

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTY VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
395	1.00	.90	.0130	29.0	.014	.08	.23	3.9	90.	393.5	.9	0.	.000	.783	.014
396	.90	.80	.0130	28.9	.014	.08	.23	3.9	91.	394.1	.9	0.	.000	.784	.014
397	.80	.70	.0131	28.8	.014	.08	.23	3.9	91.	394.8	.9	0.	.000	.785	.014
398	.70	.60	.0131	28.7	.014	.08	.23	4.0	91.	395.4	.9	0.	.000	.786	.014
399	.60	.50	.0132	28.6	.014	.08	.23	4.0	91.	396.1	.9	0.	.000	.787	.014
400	.50	.40	.0132	28.6	.014	.08	.23	4.0	91.	396.7	.9	0.	.000	.788	.014
401	.40	.30	.0132	28.5	.014	.08	.23	4.0	91.	397.4	.9	0.	.000	.789	.014
402	.30	.20	.0133	28.4	.014	.08	.23	4.0	92.	398.0	.9	0.	.000	.790	.014
403	.20	.10	.0133	28.3	.015	.08	.23	4.0	92.	398.6	.9	0.	.000	.791	.015
404	.10	.00	.0134	28.2	.015	.08	.23	4.0	92.	399.3	.9	0.	.000	.792	.015
TOT AVG CUM					.014	.80	.23	4.0	912.	3963.9	.9				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O.	RENER RATE	CBOD DECAT	CBOD SETT	ANBOD DECAT	FULL SOD	CORR SOD	ORGN DECAT	ORGN SETT	NH3 DECAT	NH3 SRCE	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAT	NCM DECAT	NCM SETT
		MG/L	1/DA	1/DA	1/DA	1/DA	*	*	1/DA	1/DA	1/DA	*	*	1/DA	*	**	**	1/DA	1/DA	1/DA
395	.900	7.73	4.45	.19	.25	.00	4.14	4.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.06
396	.800	7.71	4.46	.19	.25	.00	4.18	4.18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.06
397	.700	7.69	4.48	.20	.25	.00	4.22	4.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.06
398	.600	7.67	4.49	.20	.25	.00	4.26	4.26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.06
399	.500	7.65	4.50	.20	.25	.00	4.30	4.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.06
400	.400	7.63	4.51	.20	.25	.00	4.34	4.34	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.06
401	.300	7.61	4.52	.20	.25	.00	4.38	4.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.06
402	.200	7.59	4.54	.20	.25	.00	4.42	4.42	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.06
403	.100	7.57	4.55	.20	.25	.00	4.46	4.46	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.06
404	.000	7.55	4.56	.21	.25	.00	4.51	4.51	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.06
20	DEG C RATE				.13			2.40	.00	.00	.00	.00	.00	.00	.00			.00	20.35	.25
AVG	20 DEG C RATE		3.79			.25	.00													
* G/SQ M/D			** MG/L/DAY																	

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
395	.900	28.65	.1	.0	.0	3.25	9.10	9.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.63
396	.800	28.80	.1	.0	.0	3.17	8.78	8.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.48
397	.700	28.95	.1	.0	.0	3.10	8.46	8.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.33
398	.600	29.10	.1	.0	.0	3.04	8.16	8.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.19
399	.500	29.25	.1	.0	.0	2.99	7.86	7.86	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.06
400	.400	29.40	.1	.0	.0	2.95	7.55	7.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.95
401	.300	29.55	.1	.0	.0	2.90	7.21	7.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.89
402	.200	29.70	.1	.0	.0	2.87	6.72	6.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.98
403	.100	29.85	.1	.0	.0	2.86	5.79	5.79	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.52
404	.000	30.00	.1	.0	.0	2.92	3.58	3.58	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.33

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

1
 STREAM SUMMARY
 N. COULLEE TRIEF

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

TRAVEL TIME = .8 DAYS

MAXIMUM EFFLUENT = 29.0 PERCENT

FLOW = .0130 TO .0134 CMS
 DISPERSION = .7827 TO .7923 SQ M/S
 VELOCITY = .0144 TO .0145 M/S
 DEPTH = .23 TO .23 M

WIDTH	=	3.9	TO	4.0	M
BOD DECAY	=	.19	TO	.21	PER DAY
NH3 DECAY	=	.00	TO	.00	PER DAY
SDMNT OXYGEN DMND	=	4.14	TO	4.51	G/SQ M/D
NH3 SOURCE	=	.00	TO	.00	G/SQ M/D
REAERATION	=	4.45	TO	4.56	PER DAY
BOD SETTLING	=	.25	TO	.25	PER DAY
ORGN DECAY	=	.00	TO	.00	PER DAY
ORGN SETTLING	=	.00	TO	.00	PER DAY
TEMPERATURE	=	28.65	TO	30.00	DEG C
DISSOLVED OXYGEN	=	2.86	TO	3.25	MG/L

DATA AS INPUT TO CALIBRATION PLOTS

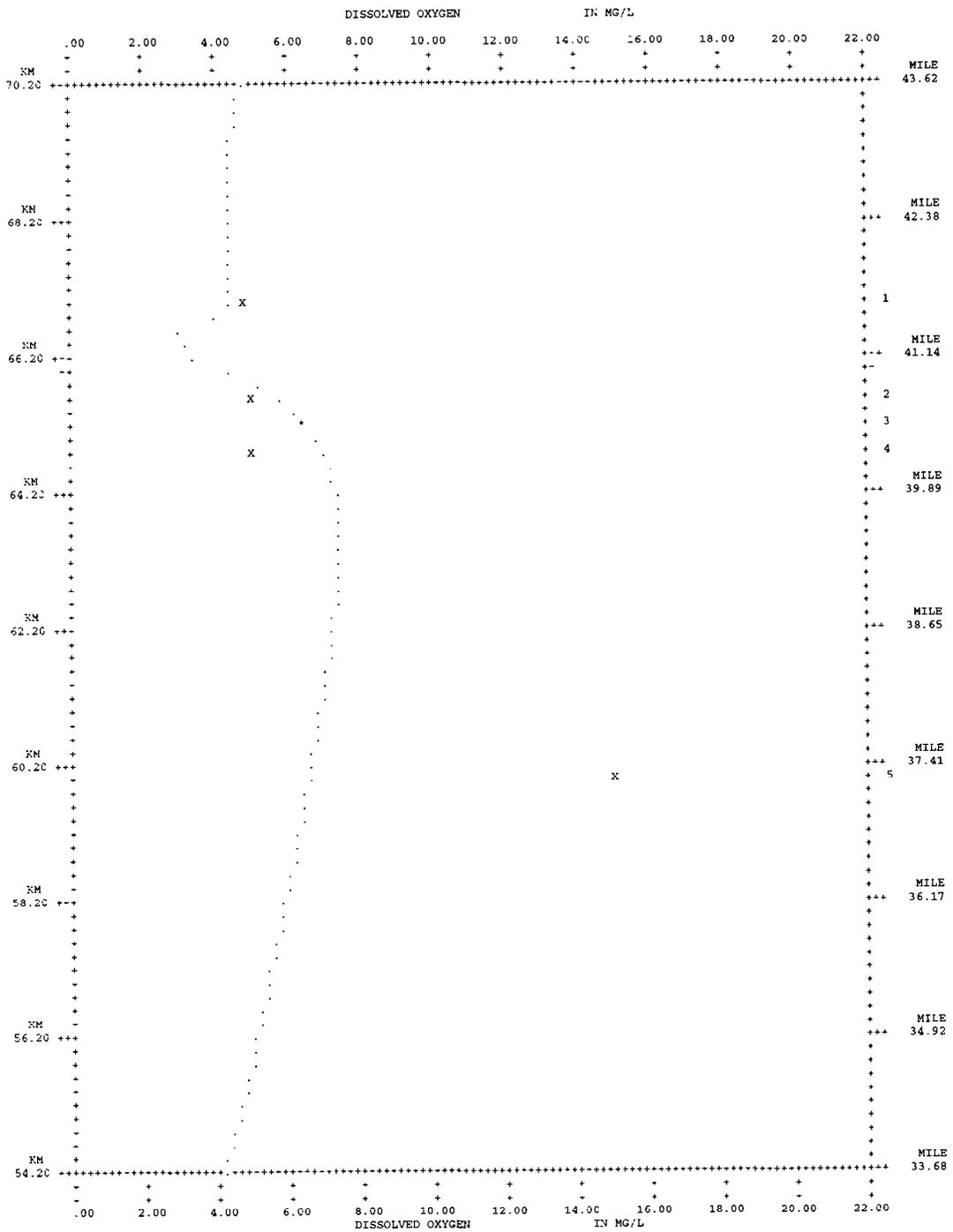
BAYOU BLANC

STATION 2	KILOMETER	25.26
DO		0.9
UCBOD		26.7
UNBOD		33.6
STATION 3	KILOMETER	23.69
DO		1.69
UCBOD		16.0
UNBOD		29.1
STATION L1	KILOMETER	22.96
DO		4.57
UCBOD		10.9
UNBOD		25.2
STATION L2	KILOMETER	22.72
DO		17.3
UCBOD		16.9
UNBOD		20.9
STATION 5	KILOMETER	22.27
DO		7.3
UCBOD		16.2
UNBOD		19.2
STATION 6	KILOMETER	20.51
DO		5.92
UCBOD		8.0
UNBOD		17.8
STATION 7	KILOMETER	17.09
DO		4.16
UCBOD		13.9
UNBOD		5.0

BAYOU PLAQUEMINE BRULE

STATION 1	KILOMETER	67.06
DO		4.8
UCBOD		9.7
UNBOD		7.5
STATION 2	KILOMETER	65.74
DO		5.1
UCBOD		18.2
UNBOD		13.7
STATION 3	KILOMETER	65.26
DO		6.4
UCBOD		21.5
UNBOD		23.6
STATION 4	KILOMETER	64.99
DO		5.1
UCBOD		12.4
UNBOD		21.6
STATION 5	KILOMETER	60.08
DO		15.0
UCBOD		13.8
UNBOD		12.0
STATION 6	KILOMETER	22.78
DO		3.5
UCBOD		5.5
UNBOD		9.3
STATION 7	KILOMETER	13.12
DO		3.0
UCBOD		7.1
UNBOD		5.17
STATION 8	KILOMETER	
DO		2.6
UCBOD		4.3
UNBOD		5.8

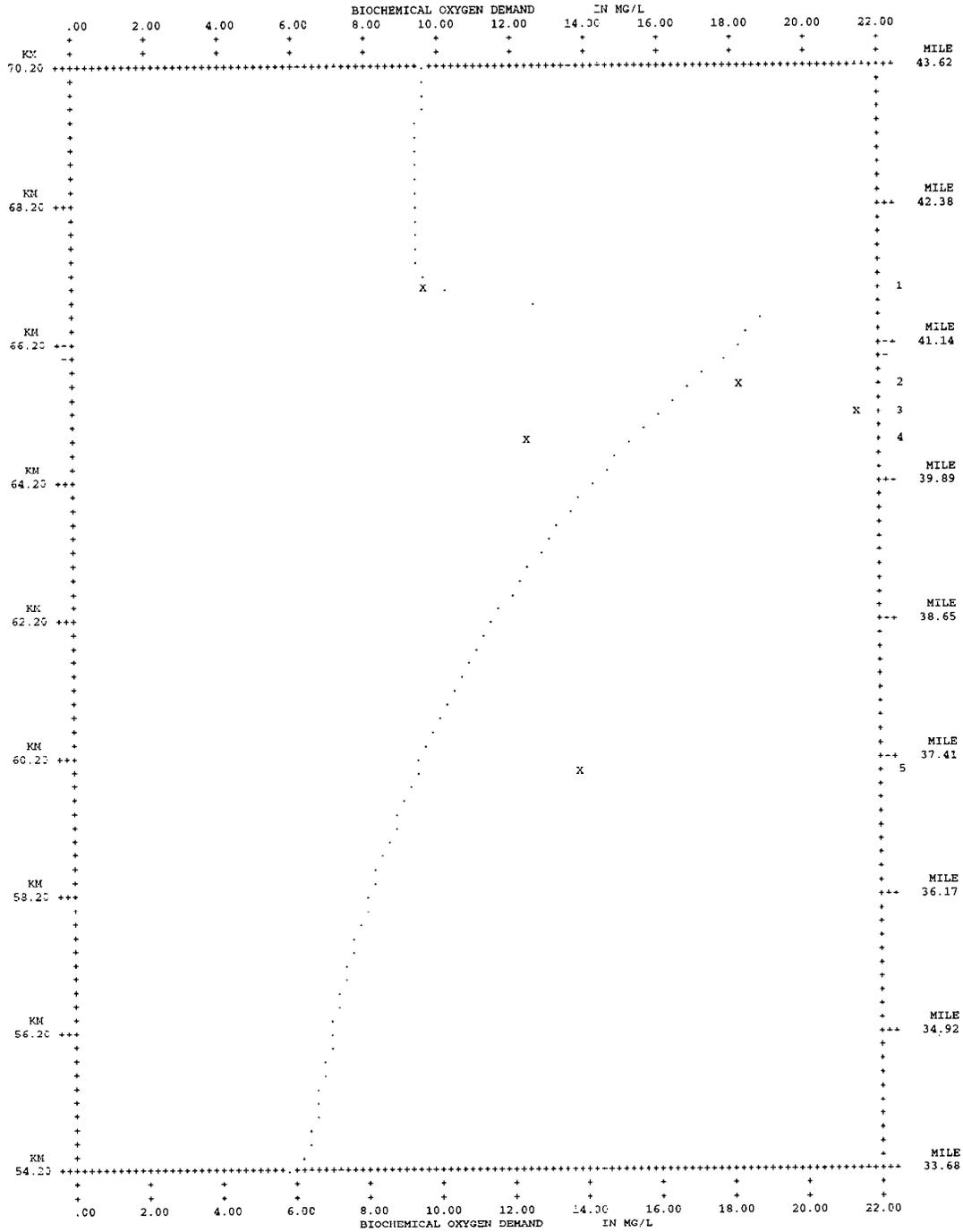
OVERLAY SET # 1. PLOT # 1: BBB @ CHURCH PT RCH 1-3



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

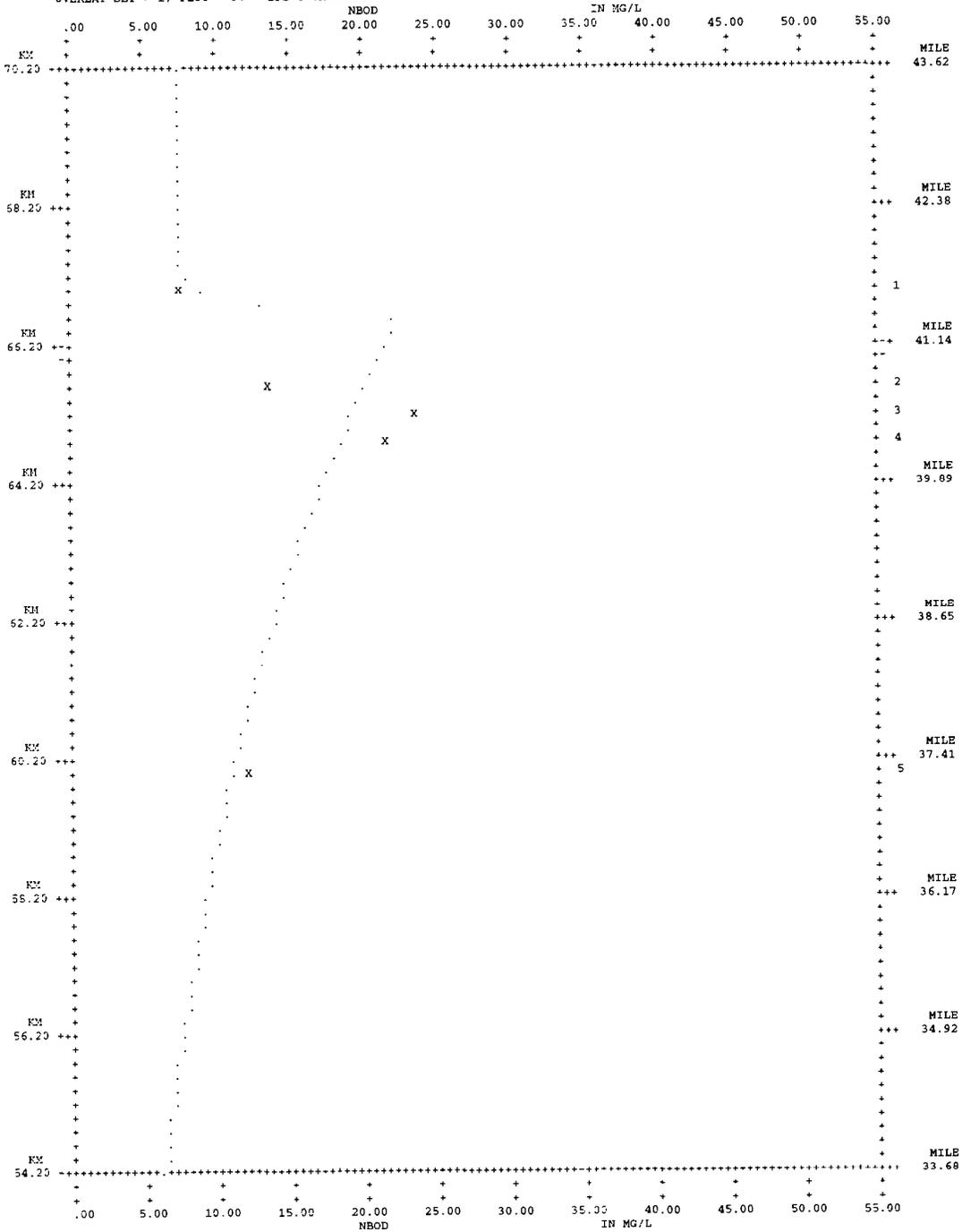
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. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

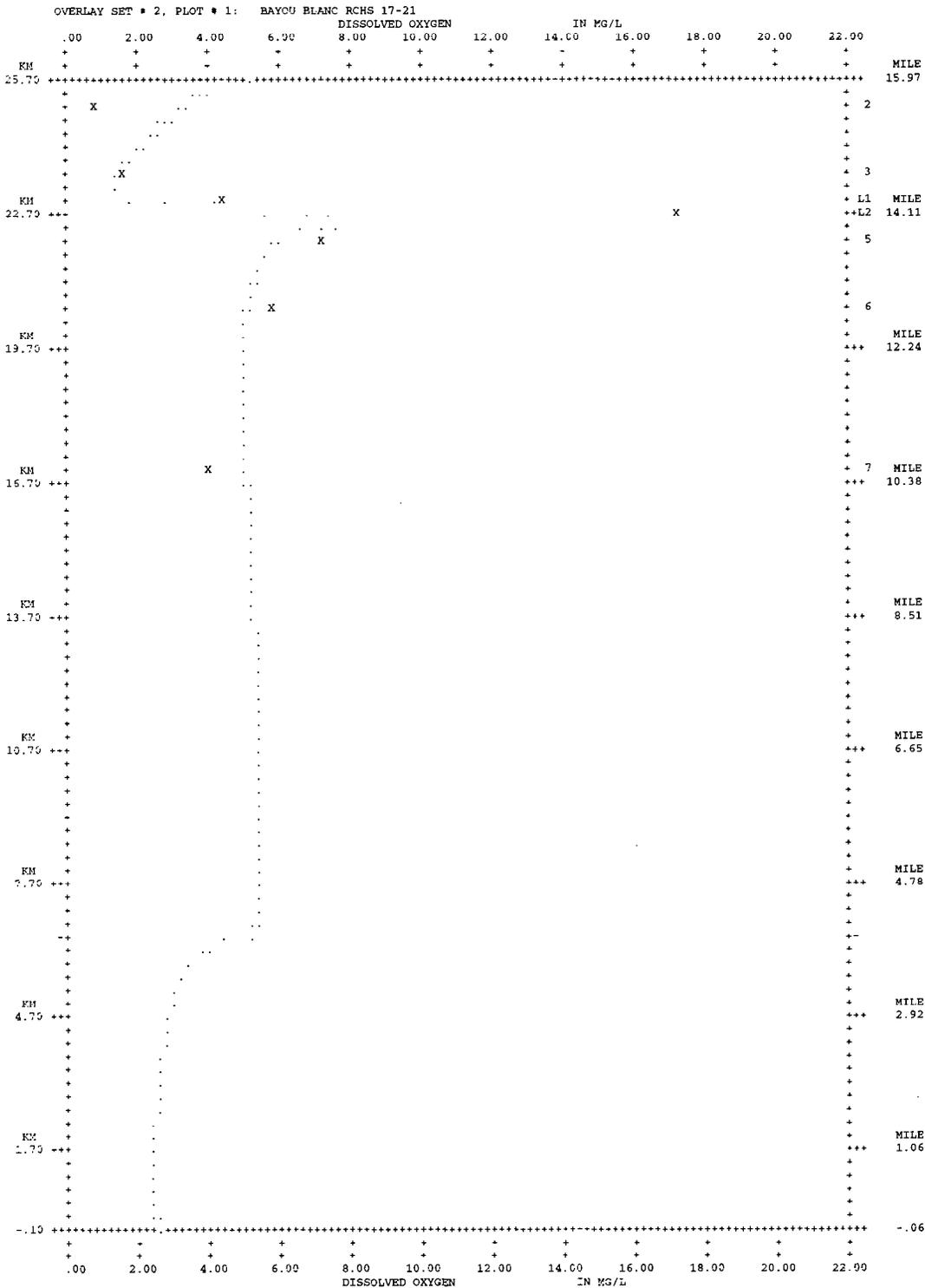
BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

OVERLAY SET # 1, PLOT # 3: BPB @ CHURCH PT RCH 1-3



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 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

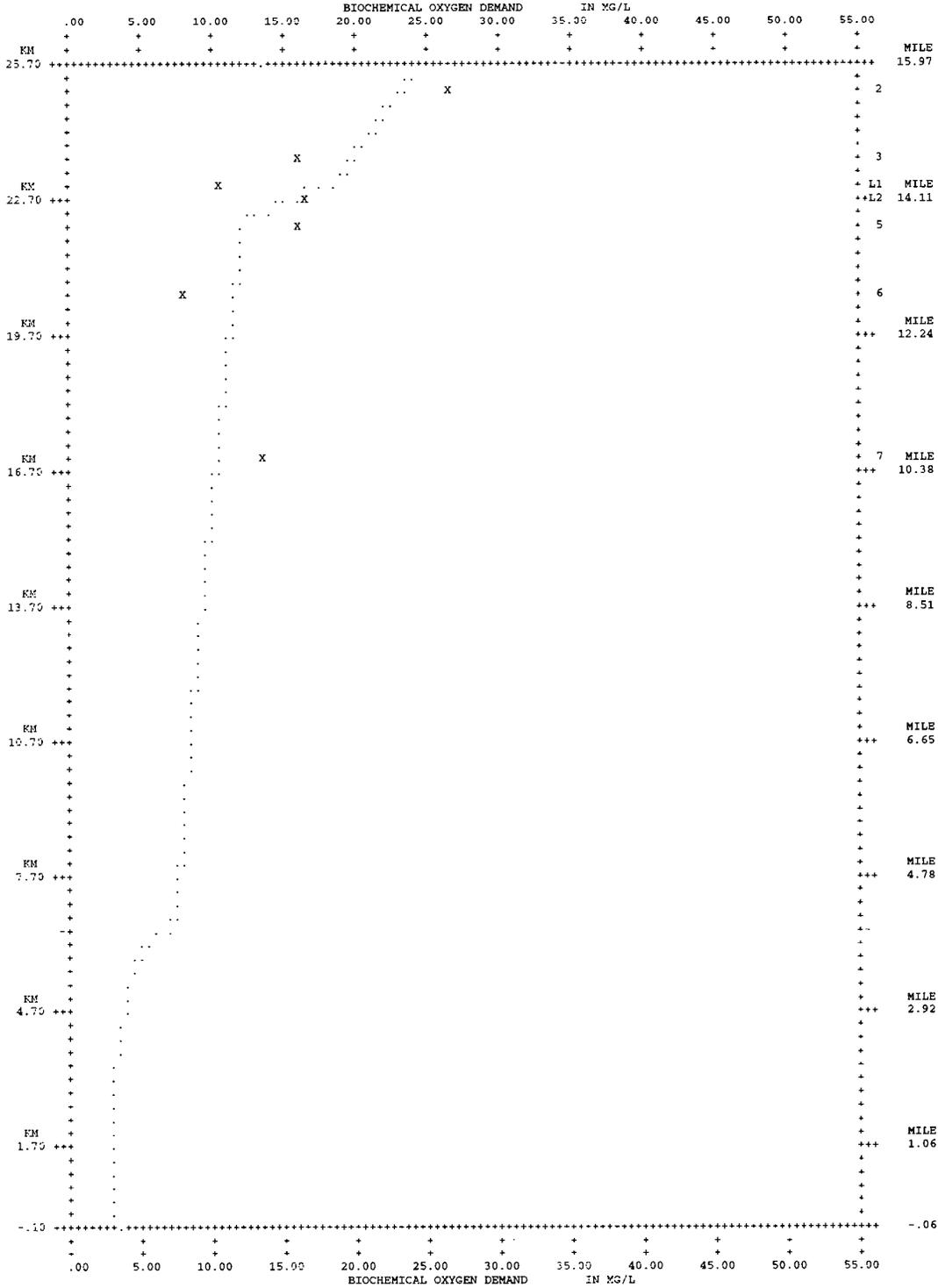
BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN



..... = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- +- INDICATES MODEL REACH BOUNDARIES

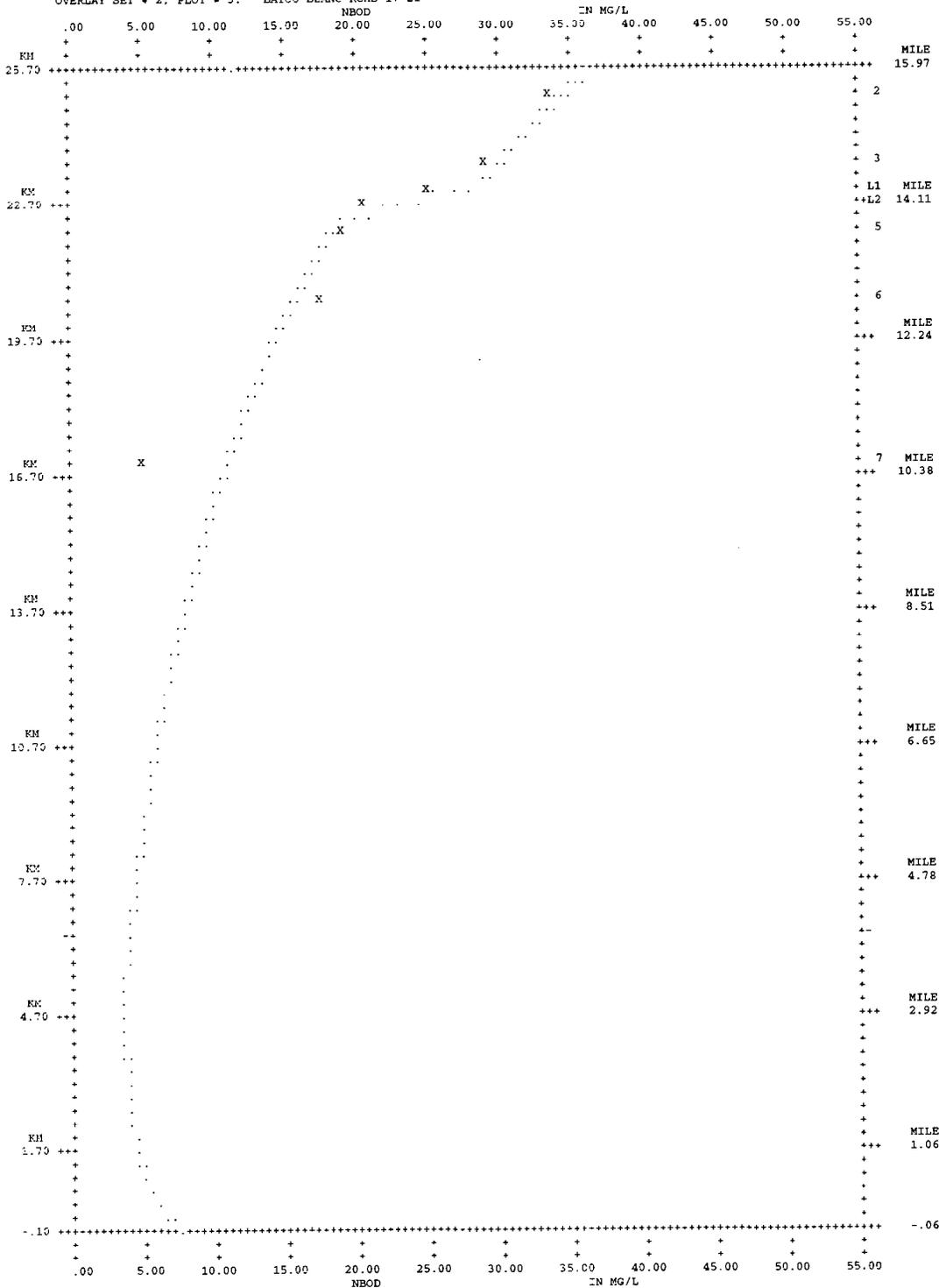
BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

OVERLAY SET # 2, PLOT # 2: BAYOU BLANC RCHS 17-21



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- ++ INDICATES MODEL REACH BOUNDARIES
 RAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

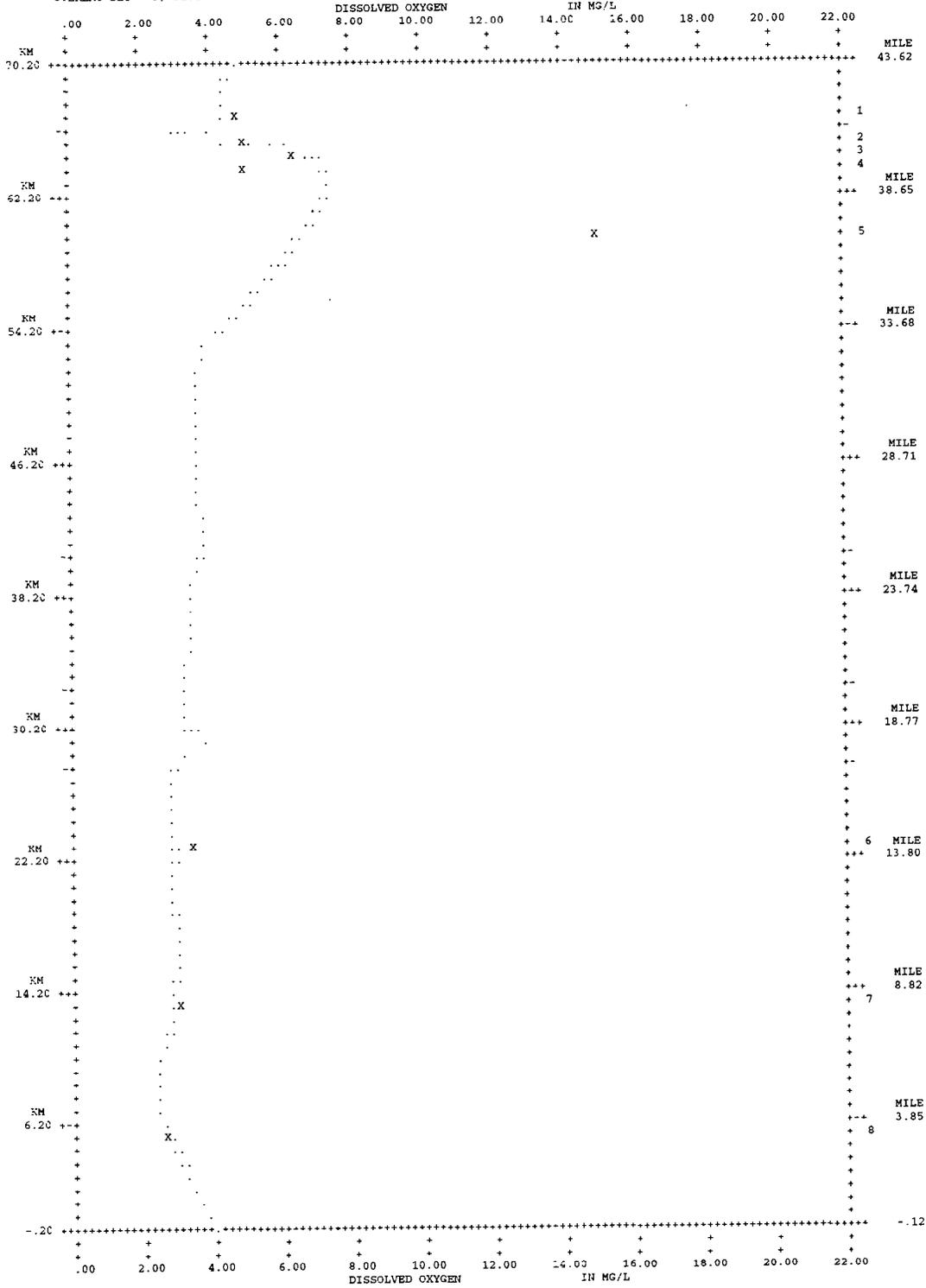
OVERLAY SET # 2, PLOT # 3: BAYOU BLANC RCHS 17-21



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 | OR * INDICATES PROFILE = OBSERVED DATA
 +- +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

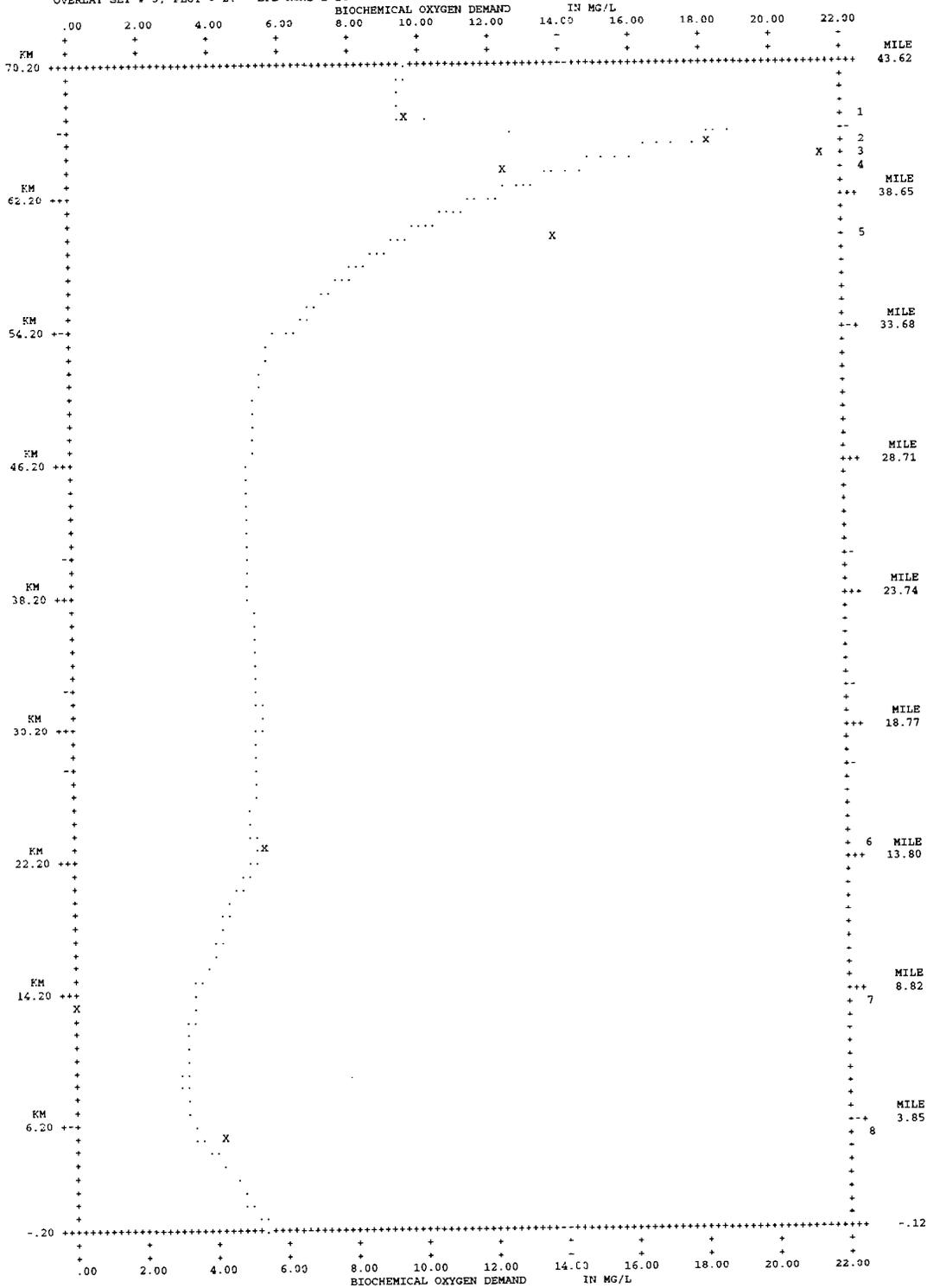
OVERLAY SET # 3, PLOT # 1: BPB RCHS 1-26



. . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

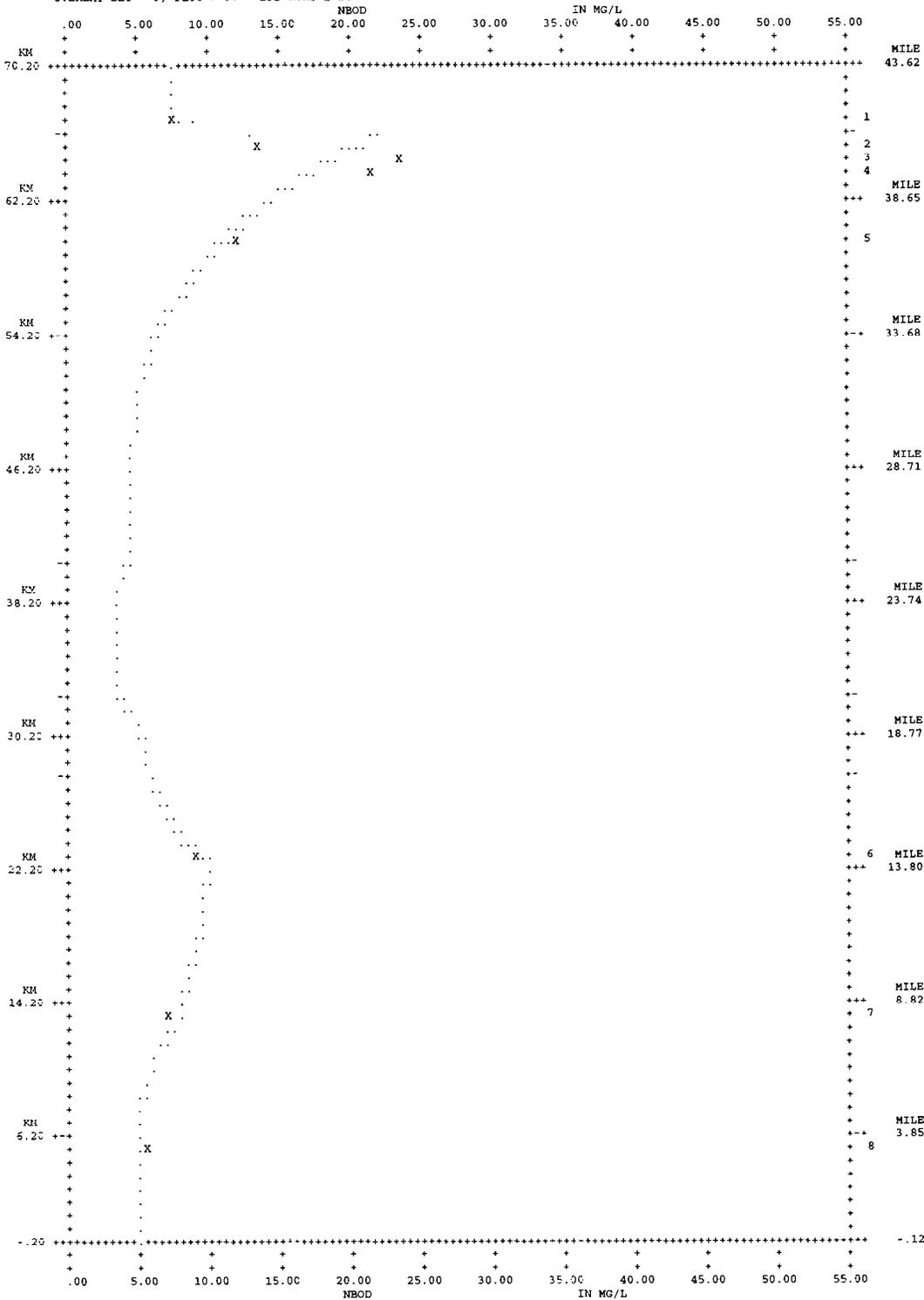
OVERLAY SET # 3, PLOT # 2: BPB RCHS 1-26



. = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU LAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

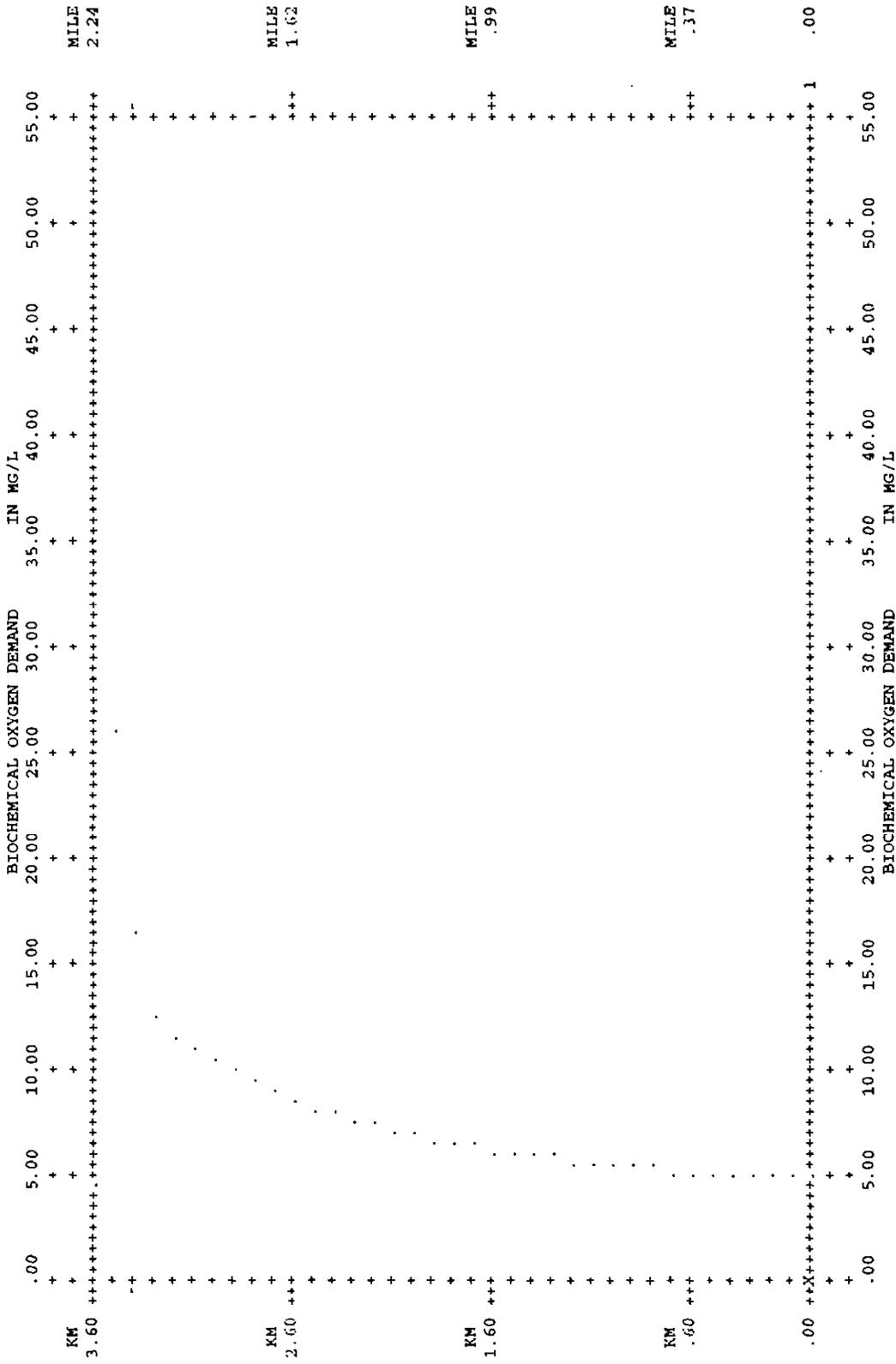
OVERLAY SET # 3, PLOT # 3: BPB RCHS 1-26



. . . = NBOD
 !-X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

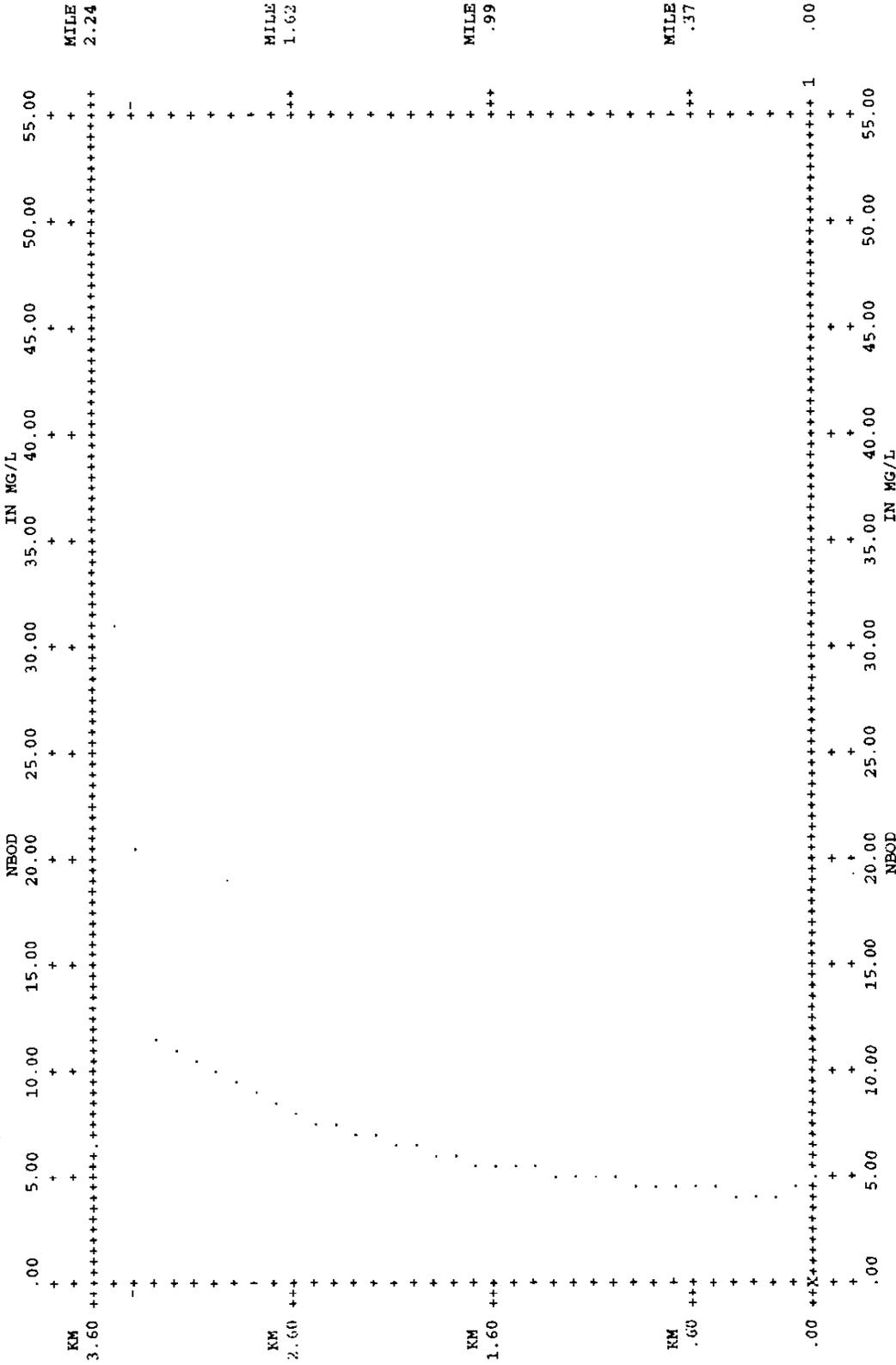
OVERLAY SET # 1, PLOT # 2: ATWOOD RCHS 7-8



..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN

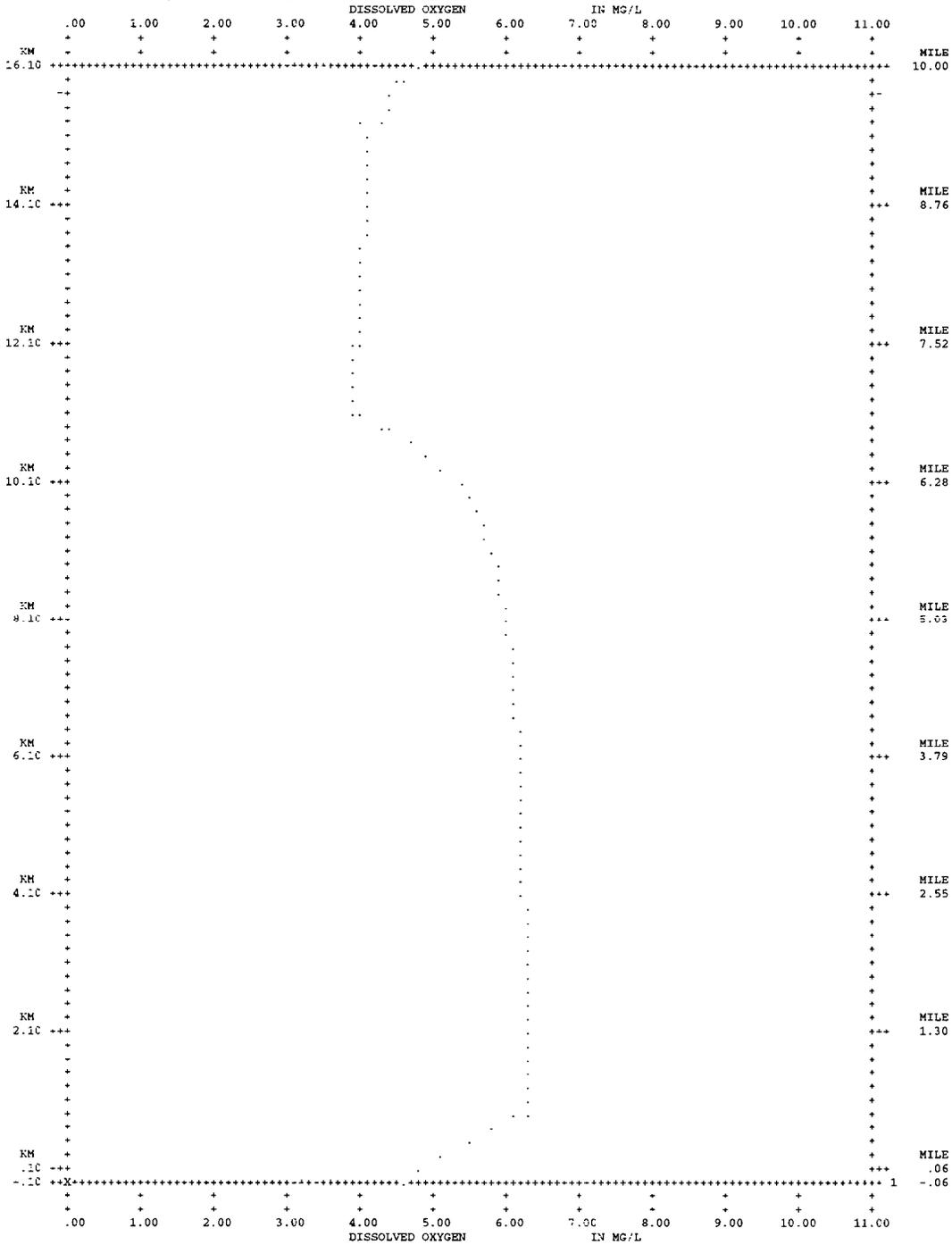
OVERLAY SET # 1, PLOT # 3: ATWOOD RCHS 7-8



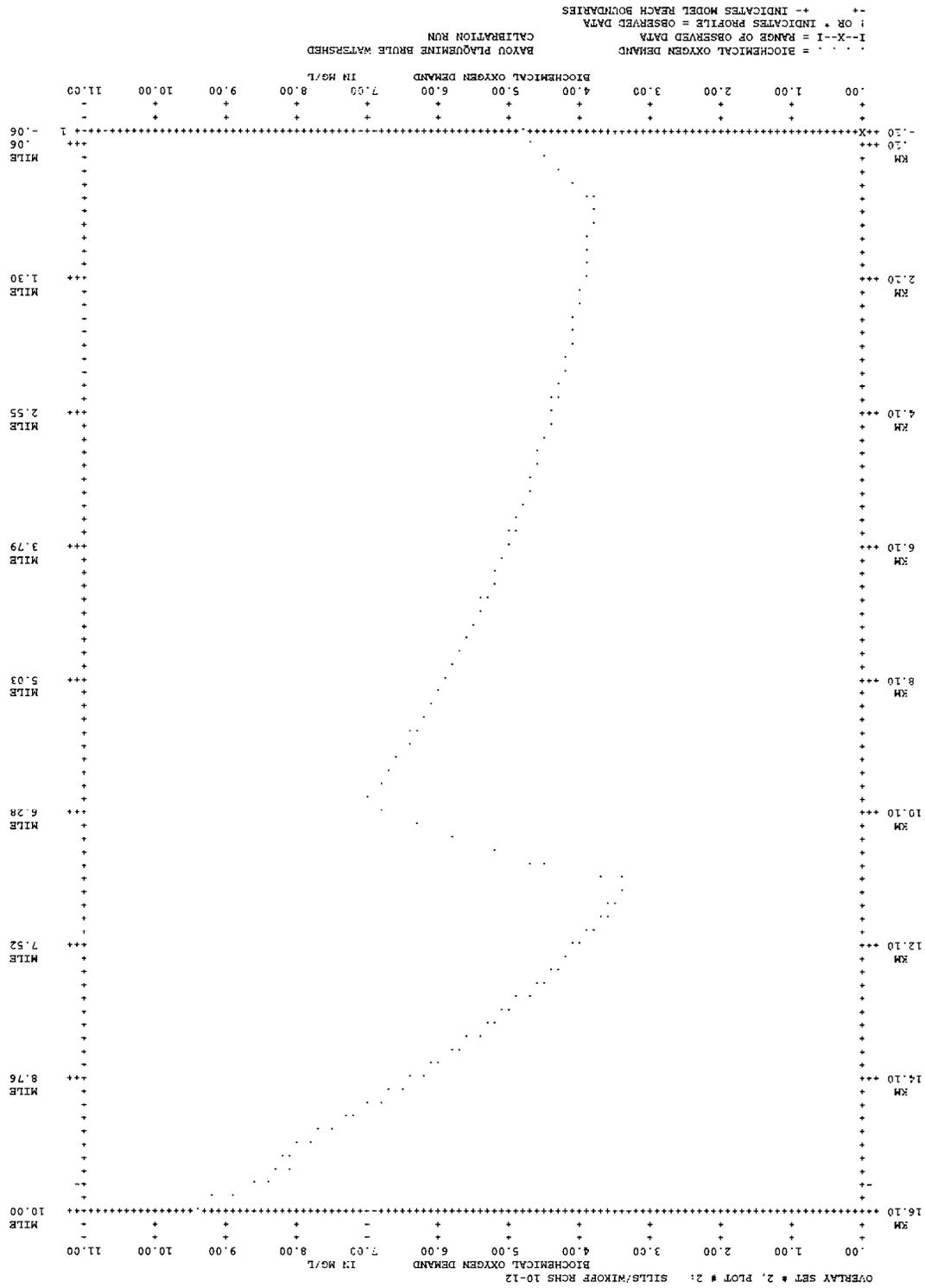
BAYOU PLAQUEMINE BRULE WATERSHED
CALIBRATION RUN

..... = NBOD
I--X--I = RANGE OF OBSERVED DATA
! OR * INDICATES PROFILE = OBSERVED DATA
--* --* INDICATES MODEL REACH BOUNDARIES

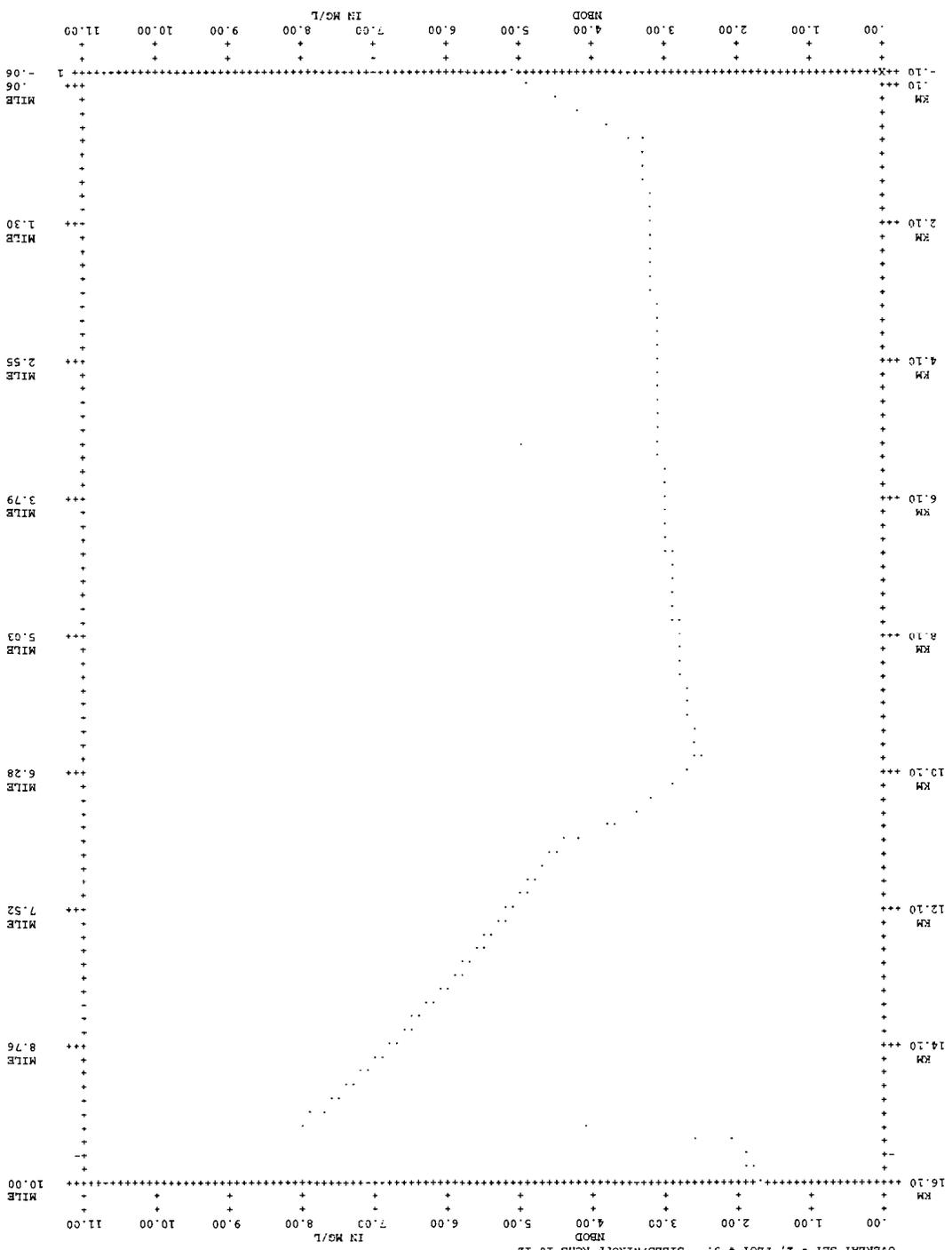
OVERLAY SET # 2, PLOT # 1: SILLS/WIROFF RCHS 10-12



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES
 BAYOU PLAQUEMINE BRULE WATERSHED
 CALIBRATION RUN



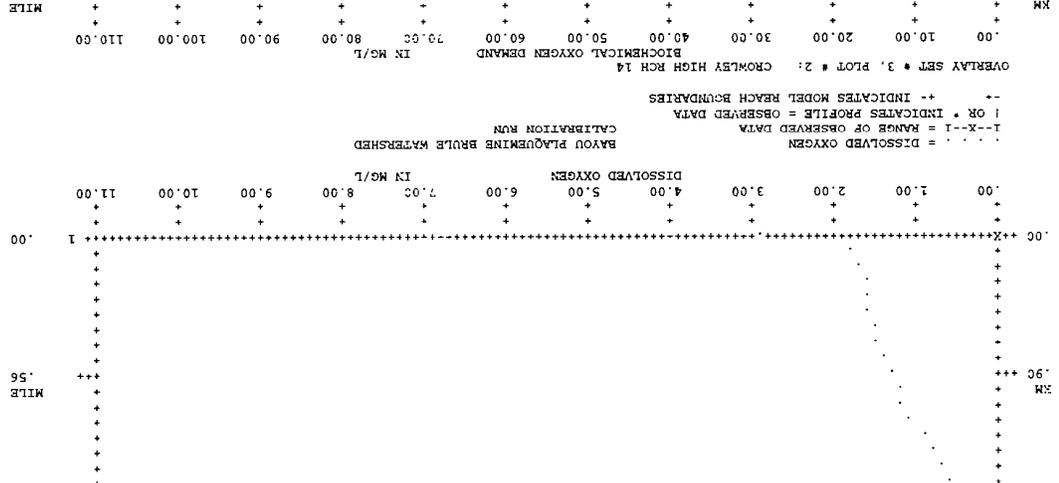
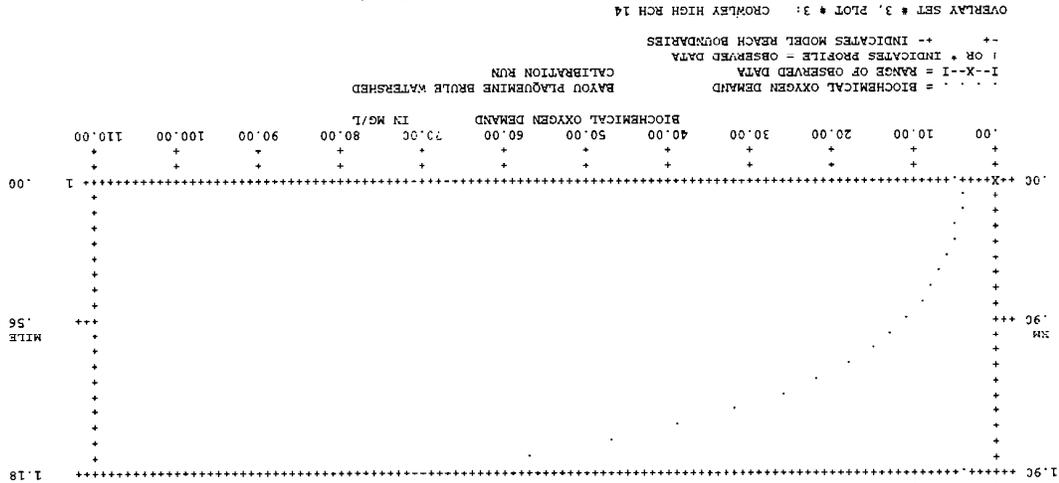
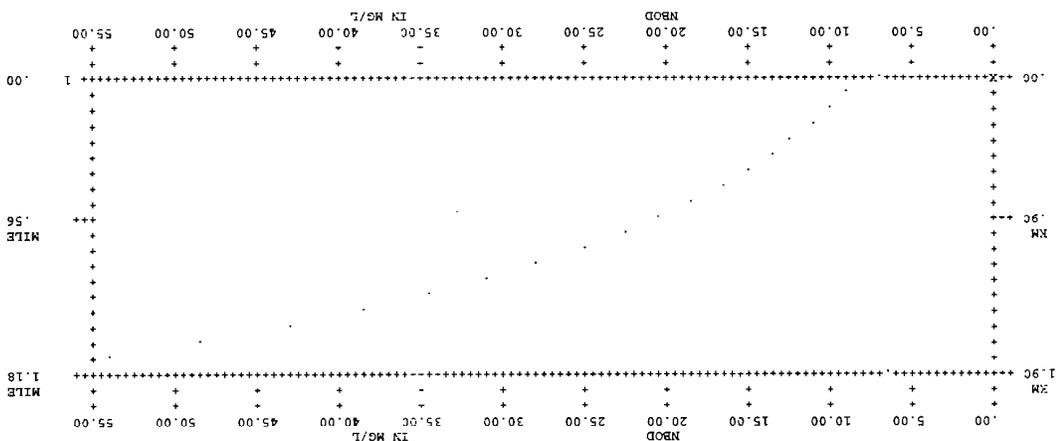
OVERLAY SET # 2, PLOT # 3: SILTS/MHKOPF RCHS 10-12



BAVON PLÄQUEMINNE BRULE WATERSHED CALIBRATION RUN

Legend: '+' = NBOD, 'x' = RANGE OF OBSERVED DATA, 'I' = INDICATES PROFILE = OBSERVED DATA, '-' = INDICATES MODEL REACH BOUNDARIES

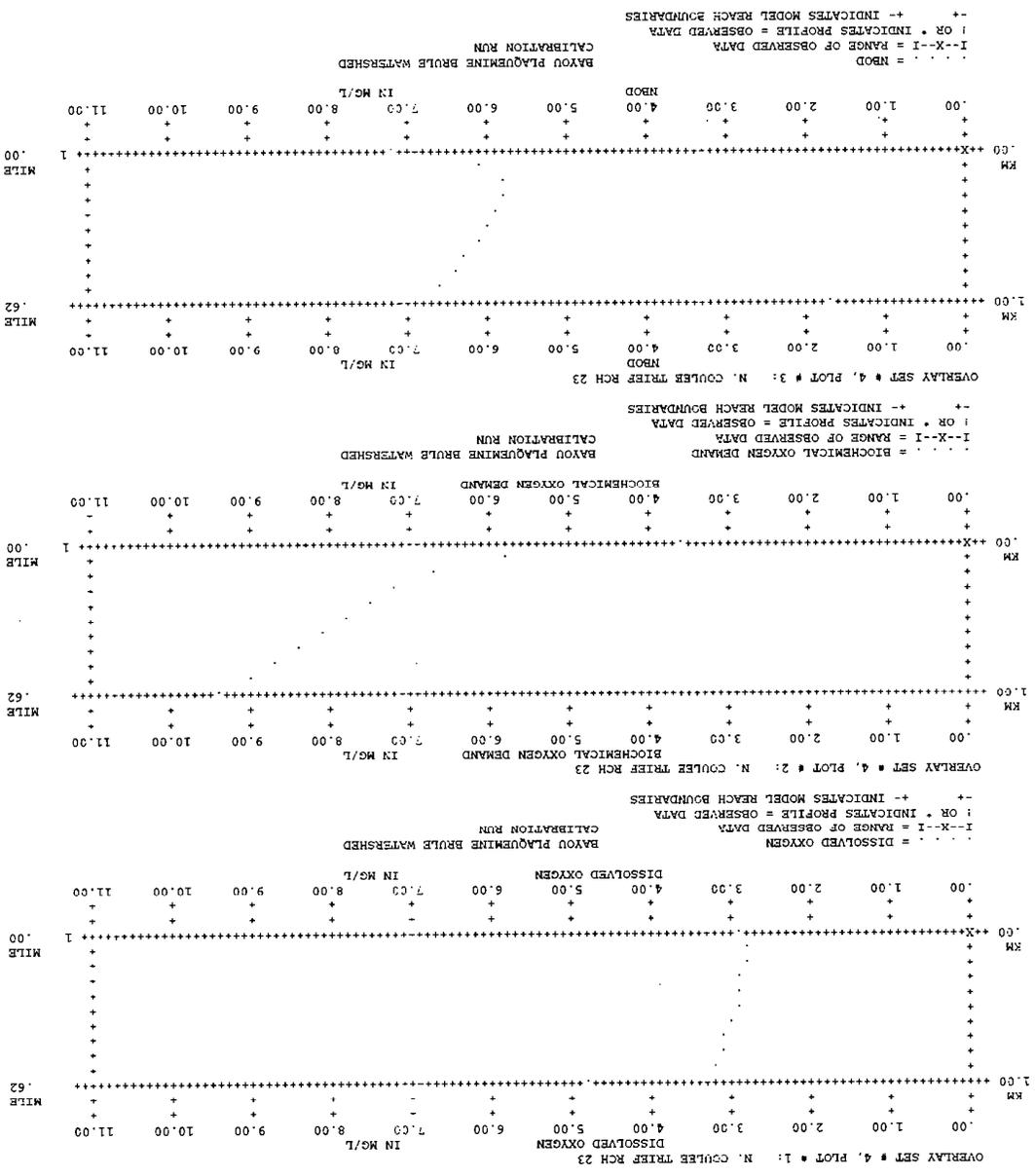
. = NBOD
 I-X-I = RANGE OF OBSERVED DATA
 | OR * INDICATES PROFILE = OBSERVED DATA
 -- INDICATES MODEL REACH BOUNDARIES



OVERLAY SET # 3, PLOT # 1: CROWLEY HIGH RCH 14
 DISSOLVED OXYGEN
 IN MG/L

OVERLAY SET # 3, PLOT # 2: CROWLEY HIGH RCH 14
 BIOCHEMICAL OXYGEN DEMAND
 IN MG/L

OVERLAY SET # 3, PLOT # 3: CROWLEY HIGH RCH 14
 NBOD
 IN MG/L



APPENDIX D – WATER QUALITY PROJECTIONS

BenLoad10.xls / Ref NP - Reference Stream Nonpoint Loading
BenLoad10.xls / Ref NP - Bayou Pfaquemine Brule Calibration Benthic Loading
ProjDat7.xls / F & C - Headwater and Facility Projection Flows, Concentrations, and Loads
ProjDat7.xls / K2 - Reaeration Data for Projections
BenLoad10.xls / Sum NP - Bayou Plaquemine Brule Summer Projection Benthic Loading
BenLoad10.xls / Win NP - Bayou Plaquemine Brule Winter Projection Benthic Loading

REFERENCE STREAM NONPOINT LOADING

Reference stream	Width (ft)	Nonpoint UNBOD (lb/mi-d)	Nonpoint UNBOD (gm/m ² -d)	Nonpoint UCBD (lb/mi-d)	Nonpoint UCBD (gm/m ² -d)	Nonpoint UBOD (gm/m ² -d)	SOD at 20 °C (gm/m ² -d)	Benthic load at 20 °C (gm/m ² -d)	Stream temp °C	SOD at stream temp (gm/m ² -d)	Benthic load at stream temp (gm/m ² -d)
Big Roaring	52	5.350	0.095	38.700	0.689	0.784	1.450	2.234	20.15	1.464	2.25
Chemini-a-haut	40	1.460	0.034	8.100	0.187	0.221	2.950	3.171	17.17	2.468	2.69
Indian Bayou	72	6.970	0.090	16.950	0.218	0.307	1.520	1.827	20.80	1.599	1.91
Leading Bayou	10	0.238	0.022	0.335	0.031	0.053	2.225	2.278	14.25	1.549	1.60
Middle Fork d'Arbonne	42	15.260	0.336	13.550	0.299	0.635	1.215	1.850	28.82	2.117	2.75
Beaucoup	26	14.000	0.498	4.750	0.169	0.667	4.200	4.867	16.45	3.359	4.03
Average						0.445	2.260	2.705			2.54

BAYOU PLAQUEMINE BRULE CALIBRATION BENTHIC LOADING										
Reach number	Reach length (km)	Reach width (m)	Nonpoint CBOD (kgm/d)	Nonpoint NBOD (kgm/d)	Nonpoint CBOD (gm/m ² -d)	Nonpoint NBOD (gm/m ² -d)	SOD at 20 °C (gm/m ² -d)	Benthic load at 20 °C (gm/m ² -d)		
1	4	5.5	15.00	10.00	0.682	0.455	2.0	3.14		
2	0.2	7.4	0.70	0.00	0.473	0.000	2.4	2.87		
3	11.8	7.4	39.30	0.00	0.450	0.000	2.4	2.85		
4	14	12	200.00	150.00	1.190	0.893	1.8	3.88		
5	8	29	680.00	600.00	2.931	2.586	0.5	6.02		
6	0.8	30	80.00	100.00	3.333	4.167	0.5	8.00		
7	0.2	3.8	0.00	0.00	0.000	0.000	2.4	2.40		
8	3.4	3.9	4.00	2.00	0.302	0.151	1.2	1.65		
9	1.1	26	80.00	100.00	2.797	3.497	0.5	6.79		
10	0.4	4.2	0.00	0.00	0.000	0.000	2.4	2.40		
11	4.7	4.3	0.00	0.00	0.000	0.000	2.4	2.40		
12	11	10.4	0.00	0.00	0.000	0.000	1.2	1.20		
13	3.2	35	418.00	400.00	3.732	3.571	0.5	7.80		
14	1.9	3.8	2.00	0.00	0.277	0.000	2.4	2.68		
15	5.4	34.3	615.00	325.00	3.320	1.755	0.0	5.08		
16	6.4	40.2	707.00	374.00	2.748	1.454	0.0	4.20		
17	2.5	3.9	0.00	0.00	0.000	0.000	3.0	3.00		
18	0.4	39.2	0.00	0.00	0.000	0.000	1.0	1.00		
19	0.5	39.2	0.00	0.00	0.000	0.000	1.0	1.00		
20	15.9	5.4	0.00	0.00	0.000	0.000	1.0	1.00		
21	6.4	20	40.00	200.00	0.313	1.563	1.0	2.88		
22	0.5	50	55.00	100.00	2.200	4.000	0.0	6.20		
23	1	4	0.00	0.00	0.000	0.000	2.4	2.40		
24	2.8	48	385.00	270.00	2.865	2.009	0.0	4.87		
25	6	63	1250.00	300.00	3.307	0.794	0.0	4.10		
26	6	52	1250.00	300.00	4.006	0.962	0.0	4.97		

BAYOU PLAQUEMINE BRULE
Headwater and Facility Projection Flows, Concentrations, and Loads

Facility	Expected flow (mgd)	Expected flow (cms)	Facility Flows, Concentrations, and Loads																		
			Summer					Winter													
			Flow with MOS (cms)	CBOD (mg/l)	UCBOD (mg/l)	NBOD (mg/l)	UNBOD (mg/l)	DO (mg/l)	UCBOD Load (lbs/day)	UNBOD Load (lbs/day)	MOS (lbs/day)	Total Load (lbs/day)	CBOD (mg/l)	UCBOD (mg/l)	NBOD (mg/l)	UNBOD (mg/l)	DO (mg/l)	UCBOD load (lbs/day)	UNBOD load (lbs/day)	MOS (lbs/day)	Total load (lbs/day)
Church Point POTW	0.800	0.03504	0.04380	10	23.0	2	8.6	5.0	153.42	57.36	52.69	263.47	20	46	10	43	6	306.83	286.82	148.41	742.06
Atwood Acres	0.046	0.00202	0.00253	10	23.0	5	21.5	5.0	8.84	8.27	4.28	21.39	30	69	15	64.5	6	26.53	24.80	12.83	64.17
Acadian Fine Foods	0.025	0.00110	0.00138	20	46.0	10	43.0	2.0	9.63	9.00	4.66	23.30	30	69	15	64.5	2	14.45	13.51	6.99	34.94
North Rayne POTW	0.034	0.00151	0.00189	20	46.0	10	43.0	2.0	13.22	12.36	6.40	31.98	30	69	15	64.5	2	19.83	18.54	9.59	47.97
Crowley High School	0.024	0.00105	0.00131	10	23.0	5	21.5	5.0	4.60	4.30	2.22	11.12	30	69	15	64.5	6	13.79	12.89	6.67	33.35
Crowley POTW	2.470	0.10821	0.13527	5	11.5	5	21.5	5.0	236.90	442.90	169.95	848.74	10	23	5	21.5	6	473.80	442.90	229.17	1145.86
Rayne POTW	1.500	0.06572	0.08215	10	23.0	5	21.5	5.0	287.73	288.97	139.17	655.87	10	23	5	21.5	6	287.73	288.97	139.17	656.87
Eshewood POTW	0.040	0.00176	0.00220	10	23.0	10	43.0	2.0	7.71	14.41	5.53	27.64	30	69	15	64.5	2	23.12	21.61	11.18	55.91
Total									722.04	817.56	384.90	1924.51						1166.08	1090.03	564.03	2820.14

Headwater Flows and Loading

Headwater	Element Number	BOD concentration										Winter					Summer								
		UCBOD (mg/l)		UNBOD (mg/l)		Flow (cfs)	UCBOD Load (lbs/day)		UNBOD Load (lbs/day)		Flow (cfs)	UCBOD Load (lbs/day)		UNBOD Load (lbs/day)		Flow (cfs)	UCBOD Load (lbs/day)		UNBOD Load (lbs/day)		Flow (cfs)	UCBOD Load (lbs/day)		UNBOD Load (lbs/day)	
		UCBOD	UNBOD	UCBOD	UNBOD		UCBOD	UNBOD	UCBOD	UNBOD		UCBOD	UNBOD	UCBOD	UNBOD		UCBOD	UNBOD	UCBOD	UNBOD		UCBOD	UNBOD		
Bayou Plaquemine Trade	1	9.49	1.73	1.00	0.028317	51.16	9.33	80.49	0.10	0.002832	5.12	0.93	6.05												
Atwood Gully	145	4.63	6.80	1.00	0.028317	24.96	36.66	61.62	0.10	0.002832	2.50	3.67	6.16												
Sills Gully	143	9.49	1.73	1.00	0.028317	51.16	9.33	80.49	0.10	0.002832	5.12	0.93	6.05												
Crowley High Gully	209	4.63	6.80	1.00	0.028317	24.96	36.66	61.62	0.10	0.002832	2.50	3.67	6.16												
Bayou Thine	287	13.69	11.77	1.00	0.028317	73.80	63.45	137.26	0.10	0.002832	7.38	6.35	13.73												
N. Collier Trail	305	9.49	1.73	1.00	0.028317	51.16	9.33	80.49	0.10	0.002832	5.12	0.93	6.05												
Blackwood Gully	80	4.60	6.80	1.00	0.028317	24.80	36.66	61.46	0.10	0.002832	2.48	3.67	6.15												
Coile Gully	91	4.60	6.80	1.00	0.028317	24.80	36.66	61.46	0.10	0.002832	2.48	3.67	6.15												
Long Point Gully	102	4.60	6.80	1.00	0.028317	24.80	36.66	61.46	0.10	0.002832	2.48	3.67	6.15												
Upper Atwood Bayou	107	9.50	1.70	1.00	0.028317	51.22	9.16	60.38	0.10	0.002832	5.12	0.92	6.04												
Upper Sills Bayou	147	9.50	1.70	1.00	0.028317	51.22	9.16	60.38	0.10	0.002832	5.12	0.92	6.04												
Upper Bayou Wilkoff	194	9.50	1.70	1.00	0.028317	51.22	9.16	60.38	0.10	0.002832	5.12	0.92	6.04												
Bayou Jones	438	4.60	6.80	1.00	0.028317	24.80	36.66	61.46	0.10	0.002832	2.48	3.67	6.15												
Totals				13.00	0.368121	530.05	338.88	868.93	1.30	0.036812	53.01	33.89	86.89												

BAYOU PLAQUEMINE BRULE

Reaeration data for projections

Reach	Stream	Summer			Winter			La K _s			
		flow (cms)	width (m)	depth (m)	flow (cms)	width (m)	depth (m)				
1	BPB	0.0028	1.5	0.22	0.00848	3.19	0.02830	4.90	0.31	0.01863	2.41
2	BPB	0.0466	7.4	0.44	0.01431	1.65	0.07210	7.40	0.44	0.02214	1.73
3	BPB	0.0466	7.4	0.44	0.01431	1.65	0.07210	7.40	0.44	0.02214	1.73
4	BPB	0.0495	12	0.86	0.00480	0.80	0.10040	12.00	0.86	0.00973	0.82
5	BPB	0.0523	28.9	2.07	0.00087	0.32	0.12880	28.90	2.07	0.00215	0.33
6	BPB	0.0551	30	2.14	0.00086	0.31	0.15710	30.00	2.14	0.00245	0.32
7	AG	0.0025	7.8	0.25	0.00128	2.68	0.00250	7.80	0.25	0.00128	2.68
8	AB	0.0054	5.1	0.23	0.00460	2.98	0.03090	12.40	0.31	0.00804	2.26
9	BPB	0.0605	26	1.86	0.00125	0.36	0.18790	26.00	1.86	0.00389	0.37
10	SG	0.0042	2	0.21	0.01000	3.37	0.02970	5.80	0.26	0.01969	2.89
11	SB	0.0089	2.5	0.22	0.01618	3.34	0.05990	6.80	0.29	0.03038	2.75
12	BW	0.0118	2.7	0.24	0.01821	3.10	0.08820	7.10	0.28	0.04437	3.06
13	BPB	0.0722	35.1	2.50	0.00082	0.27	0.27620	35.10	2.50	0.00315	0.27
14	CHG	0.0013	3.4	0.22	0.00174	3.06	0.00130	3.40	0.22	0.00174	3.06
15	BPB	0.0736	34.3	2.83	0.00076	0.24	0.27750	34.30	2.83	0.00286	0.24
16	BPB	0.2088	40.3	2.85	0.00182	0.24	0.41270	40.30	2.85	0.00359	0.24
17	BB	0.085	3.7	0.21	0.10940	5.44	0.11050	4.30	0.21	0.12237	5.71
18	BB	0.085	39.2	0.30	0.00723	2.32	0.11050	39.20	0.30	0.00940	2.35
19	BB	0.085	39.2	0.30	0.00723	2.32	0.11050	39.20	0.30	0.00940	2.35
20	BB	0.085	5.1	0.48	0.03472	1.70	0.11050	5.60	0.51	0.03869	1.63
21	BB	0.085	20	1.43	0.00297	0.47	0.11050	20.00	1.43	0.00386	0.48
22	BPB	0.2938	50	3.57	0.00165	0.19	0.52320	50.00	3.57	0.00293	0.19
23	NCT	0.005	2.3	0.21	0.01035	3.38	0.03050	6.10	0.26	0.01923	2.88
24	BPB	0.2988	47.8	3.43	0.00182	0.20	0.55370	47.80	3.43	0.00338	0.20
25	BPB	0.2988	63.5	4.50	0.00105	0.15	0.55370	63.50	4.50	0.00194	0.15
26	BPB	0.3017	51.8	3.71	0.00157	0.18	0.58210	51.80	3.71	0.00303	0.18

BAYOU PLAQUEMINE BRULE SUMMER PROJECTION BENTHIC LOADING																		
Reach number	Reach length (km)	Reach width (m)	Nonpoint CBOD (kgm/d)	Nonpoint NBOD (kgm/d)	Nonpoint CBOD (gm/m ² -d)	Nonpoint NBOD (gm/m ² -d)	SOD at 20°C (gm/m ² -d)	Stream temp (°C)	SOD at stream temp (gm/m ² -d)	Benthic load at 20°C (gm/m ² -d)	20°C Natural background load (gm/m ² -d)	Anthro* load at 20°C (gm/m ² -d)	Anthro load reduction (%)	Cal benthic load @ 20°C (gm/m ² -d)	Reach area (m ²)	Total summer benthic load (gm/d)	Total cal benthic load (gm/d)	
1	4.0	15	3.00	0.500	0.500	0.000	1.0	28.100	1.67	2.00	0.99	1.01	53	3.14	6000	12000	18818	
2	0.2	7.4	0.70	0.473	0.000	0.000	1.4	28.100	2.33	1.87	0.99	0.88	53	2.87	1480	2772	4252	
3	11.8	7.4	39.30	0.000	0.450	0.000	1.4	28.100	2.33	1.85	0.99	0.86	54	2.85	87320	161548	248968	
4	14.0	12.0	120.00	0.000	0.714	0.714	1.0	28.100	1.87	2.43	0.99	1.44	50	3.88	168000	408000	652400	
5	8.0	30.0	500.00	2.163	2.163	2.163	0.5	28.100	0.83	4.83	2.00	2.83	30	6.02	231200	1156000	1920000	
6	8.0	30.0	70.00	2.917	2.917	2.917	0.5	28.100	0.83	6.33	2.00	4.33	28	8.00	24000	152000	3744	
7	0.2	7.4	0.00	0.000	0.000	0.000	1.6	28.100	2.66	1.60	0.99	0.61	57	2.40	1560	2496	28654	
8	3.4	5.1	3.00	2.00	0.173	0.115	1.0	28.100	1.87	1.29	0.99	0.30	55	1.95	17340	22340	194300	
9	1.1	26.0	70.00	2.448	2.448	2.448	0.5	28.100	0.83	5.40	2.00	3.40	29	6.79	28600	154300	1920	
10	0.4	2.0	0.00	0.000	0.000	0.000	1.6	28.100	2.66	1.30	0.99	0.61	57	2.40	11750	18800	28200	
11	4.7	2.5	0.00	0.000	0.000	0.000	1.6	28.100	2.66	1.10	0.99	0.11	48	1.20	29700	32670	35640	
12	11.0	2.7	0.00	0.000	0.000	0.000	1.1	28.100	1.83	1.10	0.99	0.11	48	1.20	112320	656160	876497	
13	3.2	35.1	300.00	2.671	2.671	2.671	0.5	28.100	0.83	5.84	2.00	3.84	34	7.80	64600	31892	17283	
14	1.9	33.4	1.00	0.000	0.000	0.000	1.7	28.100	2.83	1.85	0.99	0.86	49	2.88	185220	780000	940000	
15	5.4	34.3	480.00	2.592	2.592	2.592	0.0	28.100	0.00	4.21	2.00	2.21	28	5.08	185220	780000	940000	
16	6.4	40.3	565.00	2.191	2.191	2.191	0.0	28.100	0.00	3.57	2.00	1.57	29	4.20	257920	920000	1083689	
17	2.5	3.7	0.00	0.000	0.000	0.000	1.8	28.100	3.00	1.80	0.99	0.81	60	3.00	9260	16650	27750	
18	0.4	39.2	0.00	0.000	0.000	0.000	1.0	28.100	1.67	1.00	0.99	0.01	0	1.00	15680	15680	15680	
19	0.5	39.2	0.00	0.000	0.000	0.000	1.0	28.100	1.67	1.00	0.99	0.01	0	1.00	19600	19600	19600	
20	15.9	5.1	0.00	0.000	0.000	0.000	1.0	28.100	1.67	1.00	0.99	0.01	0	1.00	81090	81090	81090	
21	6.4	20.0	40.00	140.00	0.313	1.094	1.0	28.100	1.67	2.41	2.00	0.41	54	2.88	128000	308000	368000	
22	0.5	50.0	55.00	70.00	2.200	2.800	0.0	28.100	0.00	5.00	2.00	3.00	29	6.20	25000	125000	155000	
23	1.0	2.3	0.00	0.000	0.000	0.000	1.7	28.100	2.83	1.70	0.99	0.71	50	2.40	23000	3910	5520	
24	2.8	47.8	270.00	2.017	2.017	2.017	0.0	28.100	0.00	4.03	2.00	2.03	29	4.87	133840	540000	652271	
25	6.0	63.5	1000.00	300.00	2.625	0.787	0.0	28.100	0.00	3.41	2.00	1.41	33	4.10	381000	1300000	1544038	
26	6.0	51.8	1000.00	300.00	3.218	0.965	0.0	28.100	0.00	4.18	2.00	2.18	26	4.97	310800	1300000	1544038	
Total -->															25	2276230	8161878	10148713
Watershed average value -->															25	4.46	3.59	4.46

* Anthropogenic or man-made
 * Negative values set to zero.
 Gray rows are smaller streams (upper reaches of Bayou Plaquemine Brule and tributaries)
 White rows are the larger reaches of Bayou Plaquemine Brule

BAYOU PLAQUEMINE BRULE WINTER PROJECTION BENTHIC LOADING

Reach number	Reach length (km)	Reach width (m)	Nonpoint CBOD (kgm/d)	Nonpoint NBOD (kgm/d)	Nonpoint CBOD (gm/m ² -d)	Nonpoint NBOD (gm/m ² -d)	SOD at 20 °C (gm/m ² -d)	SOD at 20 °C (gm/m ² -d)	Stream temp (°C)	SOD at stream temp (gm/m ² -d)	Benthic load at 20 °C (gm/m ² -d)	20 °C Natural background load (gm/m ² -d)	Anthro' load at 20 °C** (gm/m ² -d)	Anthro load reduction (%)	Cal benthic load @ 20 °C (gm/m ² -d)	Reach area (m ²)	Total summer benthic load (gm/d)	Total cal benthic load (gm/d)	
2	0.2	7.4	0.70	0.00	0.473	0.000	1.4	15.700	1.07	1.87	0.88	0.88	0.88	47	2.87	1480	2772	4252	
3	11.8	7.4	39.30	0.00	0.450	0.000	1.4	15.700	1.07	1.85	0.86	0.86	0.86	54	2.85	87320	161548	248868	
4	14.0	12.0	120.00	0.00	0.714	0.000	1.0	15.700	0.76	2.43	1.44	1.44	1.44	50	3.88	168000	408000	652400	
5	8.0	28.9	500.00	0.00	2.163	0.000	0.5	15.700	0.38	4.83	2.83	2.83	2.83	30	6.02	231200	1115600	1391186	
6	0.8	30.0	70.00	0.00	2.917	0.000	0.5	15.700	0.38	6.33	4.33	4.33	4.33	28	6.00	24000	152000	192000	
7	0.2	7.8	0.00	0.00	0.000	0.000	1.6	15.700	1.22	1.60	0.61	0.61	0.61	57	2.40	1560	2496	3744	
8	3.4	12.4	7.00	0.00	0.166	0.000	1.0	15.700	0.76	1.33	0.34	0.34	0.34	48	1.65	42160	56160	69689	
9	1.1	26.0	70.00	0.00	2.448	0.000	0.5	15.700	0.38	5.40	3.40	3.40	3.40	29	6.79	28600	154300	194300	
10	0.4	5.8	0.00	0.00	0.000	0.000	1.6	15.700	1.22	1.60	0.61	0.61	0.61	57	2.40	2320	3712	5568	
11	4.7	6.8	0.00	0.00	0.000	0.000	1.6	15.700	1.22	1.60	0.61	0.61	0.61	57	2.40	31960	51136	76704	
12	1.0	7.1	0.00	0.00	0.000	0.000	1.1	15.700	0.84	1.10	0.11	0.11	0.11	48	1.20	78100	85910	93720	
13	3.2	35.1	300.00	0.00	2.671	0.000	0.5	15.700	0.38	5.84	3.84	3.84	3.84	34	7.80	112320	656160	876480	
14	1.9	3.4	1.00	0.00	0.155	0.000	1.7	15.700	1.30	1.85	0.86	0.86	0.86	49	2.68	64600	116820	172930	
15	5.4	34.3	480.00	0.00	2.592	0.000	0.0	15.700	0.00	4.21	2.21	2.21	2.21	28	5.08	185220	780000	940000	
16	6.4	40.3	565.00	0.00	2.191	0.000	0.0	15.700	0.00	3.57	1.57	1.57	1.57	29	4.20	257920	920000	1083689	
17	2.5	4.3	0.00	0.00	0.000	0.000	1.8	15.700	1.37	1.80	0.81	0.81	0.81	60	3.00	10750	19350	32250	
18	0.4	39.2	0.00	0.00	0.000	0.000	1.0	15.700	0.76	1.00	0.01	0.01	0.01	0	1.00	15680	15680	15680	
19	0.5	39.2	0.00	0.00	0.000	0.000	1.0	15.700	0.76	1.00	0.01	0.01	0.01	0	1.00	15600	15600	15600	
20	15.9	5.6	0.00	0.00	0.000	0.000	1.0	15.700	0.76	1.00	0.01	0.01	0.01	0	1.00	89040	89040	89040	
21	6.4	20.0	40.00	0.00	0.313	1.094	1.0	15.700	0.78	2.41	2.00	2.00	2.00	54	2.88	128000	308000	368000	
22	0.5	50.0	55.00	0.00	2.200	2.800	0.0	15.700	0.00	5.00	3.00	3.00	3.00	29	6.20	25000	125000	155000	
23	1.0	6.1	0.00	0.00	0.000	0.000	1.7	15.700	1.30	1.70	0.71	0.71	0.71	50	2.40	6100	10370	14640	
24	2.8	47.8	270.00	0.00	2.017	2.017	0.0	15.700	0.00	4.03	2.03	2.03	2.03	29	4.87	133840	540000	652271	
25	6.0	63.5	1000.00	0.00	2.625	0.787	0.0	15.700	0.00	3.41	1.41	1.41	1.41	33	4.10	381000	1300000	1562302	
26	6.0	51.8	1000.00	0.00	3.218	0.965	0.0	15.700	0.00	4.18	2.18	2.18	2.18	26	4.97	310800	1300000	1544038	
Total -->																2398030	8330416	10364184	
Watershed average value -->																			4.32

* Anthropogenic or man-made
 ** Negative values set to zero.

Gray rows are smaller streams (upper reaches of Bayou Plaquemine Brule and tributaries)
 White rows are the larger reaches of Bayou Plaquemine Brule

FINAL

BAYOU PLAQUEMINE BRULE WATERSHED TMDL
TO ADDRESS DISSOLVED OXYGEN AND NUTRIENTS
INCLUDING EIGHT POINT SOURCE WASTELOAD ALLOCATIONS
AND A WATERSHED NONPOINT SOURCE LOAD ALLOCATION

SUBSEGMENT 0502

VOLUME 2

Appendix D1-G

William C. Berger, Jr.
Jay Carney
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Water Quality Modeling Section
Watershed Support Division
Office of Water Resources
Louisiana Department of Environmental Quality

March 26, 1999

Revised May 8, 2000

APPENDIX D1 – WATER QUALITY SUMMER PROJECTION OUTPUT AND CHARTS

Model Output:

SPRJA3TX.doc - Word file from which the Qual-Txn text output file was printed

SPRJB3PL.doc - Word file from which 9 plots were printed

BPB @ Church Pt Rch 1-3

Bayou Blanc Rchs 17-21

BPB Rchs 1-26

SPRJA3PL.doc - Word file from which 12 plots were printed

Atwood Rchs 7-8

Sills/Wikoff Rchs 10-12

Crowley High Rch 14

N. Coulee Trief Rch 23

Texas Natural Resource Conservation Commission
 QUAL-TX model Version 3.4 Updated December 1995

Output produced at 10:01 hours on 03/18/1999

\$\$\$ DATA TYPE 1 (TITLES AND CONTROL CARDS) \$\$\$

CARD TYPE	CONTROL TITLES
CHTKO1	BAYOU PLAQUEMINE BRULE WATERSHED
CHTKO2	SUMMER PROJECTION RUN
CHTKO3	ECHO DATA INPUT
CHTKO4	INTERMEDIATE SUMMARY
CHTKO5	CAPSULE SUMMARY
CHTKO6	FINAL REPORT
CHTKO7	LOADING SUMMARY
CHTKO8	SPECIAL REPORT
CHTKO9	LINE PRINTER PLOT
CHTK10	GRAPHICS CAPABILITY
CHTK11	SEQUENCING OUTPUT
CHTK12	METRIC UNITS
CHTK13	OXYGEN DEPENDENT RATES
CHTK14	SENSITIVITY ANALYSTS
CHTK15	OVERLAY PLOT
ENDATA01	

\$\$\$ DATA TYPE 2 (MODEL OPTIONS) \$\$\$

CARD TYPE	MODEL OPTION	
MODOPT01	TEMPERATURE	
MODOPT02	SALINITY	
MODOPT03	CONSERVATIVE MATERIAL I = CHLORIDES	IN MG/L
MODOPT04	CONSERVATIVE MATERIAL II = SULFATES	IN MG/L
MODOPT05	DISSOLVED OXYGEN	
MODOPT06	BIOCHEMICAL OXYGEN DEMAND - UCBD	
MODOPT07	NITROGEN	
MODOPT08	PHOSPHORUS	
MODOPT09	CHLOROPHYLL A	
MODOPT10	MACROPHYTES	
MODOPT11	COLIFORM	
MODOPT12	NONCONSERVATIVE MATERIAL = NISOD	IN MG/L
ENDATA02		

\$\$\$ DATA TYPE 3 (PROGRAM CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
PROGRAM	MAXIMUM ITERATION LIMIT	= 200.00000
PROGRAM	PLOT CONTROL VALUE	= 3.00000
PROGRAM	INTERMEDIATE REPORT TYPE	= 4.00000
PROGRAM	FINAL REPORT TYPE	= 1.00000
PROGRAM	BOD OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	NCM OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	INHIBITION CONTROL VALUE	= 2.00000
PROGRAM	TIDE HEIGHT (METERS)	= .07600
PROGRAM	DISPERSION EQUATION	= 1.00000
PROGRAM	ALGAE OXYGEN PROD	= .05000
PROGRAM	OCEAN EXCHANGE RATIO	= 1.00000

ENDATA03

\$\$\$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) \$\$\$

CARD TYPE	RATE CODE	THETA VALUE
TEMP	BENTHAL	1.06500
TEMP	BOD SETT	1.00000
TEMP	NCM DECA	1.07000
TEMP	NCM SETT	1.00000

ENDATA04

\$\$\$ CONSTANTS TYPE 5 (TEMPERATURE DATA) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA05		

\$\$\$ DATA TYPE 6 (ALGAE CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA06		

\$\$\$ DATA TYPE 7 (MACROPHYTE CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA07		

\$\$\$ DATA TYPE 8 (REACH IDENTIFICATION DATA) \$\$\$

CARD TYPE	REACH ID	NAME	BEGIN REACH KM	END REACH KM	ELEM LENGTH KM	REACH LENGTH KM	ELEMS PFR RCH	BEGIN ELEM NUM	END ELEM NUM
REACH ID	1	PB FREE FLOWING W/CHURCH POINT	70.20	TO	.2000	4.00	20	1	20
REACH ID	2	PB POOLED REACH BELOW CHURCH POINT	66.20	TO	.2000	.20	1	21	21
REACH ID	3	PB POOLED REACH TO HAZELWOOD GULLY	66.00	TO	.2000	11.80	59	22	80
REACH ID	4	PB HAZELWOOD GULLY TO COLES GULLY	54.20	TO	1.0900	14.90	14	81	94
REACH ID	5	PB COLES GULLY TO LONGPOINT GULLY	40.20	TO	1.0000	8.00	8	95	102
REACH ID	6	PB LONGPOINT GULLY TO ATWOOD BAYOU	32.20	TO	.4000	.80	2	103	104
REACH ID	7	AG ATWOOD GULLY	3.60	TO	.1000	.20	2	105	106
REACH ID	8	AB ATWOOD BAYOU TO BPB	3.40	TO	.1000	3.40	34	107	140
REACH ID	9	PB ATWOOD BAYOU TO BAYOU WIKOFF	31.40	TO	.5500	1.10	2	141	142
REACH ID	10	SG SILL'S GULLY	16.10	TO	.1000	.40	4	143	146
REACH ID	11	SB SILL'S BAYOU	15.70	TO	.1000	4.70	47	147	193
REACH ID	12	BW BAYOU WIKOFF TO BPB	11.00	TO	1.0000	11.00	11	194	204
REACH ID	13	PB BAYOU WIKOFF TO CROWLEY HIGH G.	30.30	TO	.8000	3.20	4	205	208
REACH ID	14	CG CROWLEY HIGH TO BPB	1.90	TO	.1000	1.90	19	209	227
REACH ID	15	PB CROWLEY HIGH TO ROLLER C.	27.10	TO	.2000	5.40	27	228	254
REACH ID	16	PB ROLLER CANAL TO BAYOU BLANC	21.70	TO	.2000	6.40	32	255	286
REACH ID	17	BB RAYNE POTW TO LAKE	25.70	TO	.1000	2.50	25	287	311
REACH ID	18	BB LAKE	23.20	TO	.1000	.40	4	312	315
REACH ID	19	BB LAKE	22.80	TO	.1000	.50	5	316	320
REACH ID	20	BB LAKE TO RK 6.4	22.30	TO	.3000	15.90	53	321	373
REACH ID	21	BB RK 6.4 TO BPB	6.40	TO	.4000	6.40	16	374	389
REACH ID	22	PB BAYOU BLANC TO N. COULLEE TRIEF	15.30	TO	.1000	.50	5	390	394
REACH ID	23	CT FSTERWOOD TO BPB	1.00	TO	.1000	1.00	10	395	404
REACH ID	24	PB BELOW N. COULLEE TRIEF	14.80	TO	.1000	2.80	28	405	432
REACH ID	25	PB ABOVE BAYOU JONAS	12.00	TO	1.0000	6.00	6	433	438
REACH ID	26	PB BAYOU JONAS TO BAYOU DES CANNES	6.00	TO	1.0000	6.00	6	439	444

ENDATA08

\$\$\$ DATA TYPE 9 (ADVECTIVE, HYDRAULIC COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	VELOCITY "A"	VELOCITY "B"	DEPTH "C"	DEPTH "D"	DEPTH "E"	MANNINGS "N"
HYDR-1	1	PB .06390000	.340	.560	.360	.150	10.000
HYDR-1	2	PB .30800000	1.000	.000	.360	.440	.000
HYDR-1	3	PB .30800000	1.000	.000	.360	.440	.000
HYDR-1	4	PB .09690000	1.000	.000	.450	.860	.000
HYDR-1	5	PB .01670000	1.000	.000	.450	2.070	.000
HYDR-1	6	PB .01560000	1.000	.000	.450	2.140	.000
HYDR-1	7	AG .01010000	.340	.830	.360	.150	10.000
HYDR-1	8	AB .02650000	.340	.550	.360	.150	10.000
HYDR-1	9	PB .02070000	1.000	.000	.450	1.860	.000
HYDR-1	10	SG .06490000	.340	.400	.360	.150	10.000
HYDR-1	11	SB .08010000	.340	.380	.360	.150	10.000
HYDR-1	12	BW .12430000	.430	.220	.450	.210	10.000
HYDR-1	13	PB .01140000	1.000	.000	.450	2.500	.000
HYDR-1	14	CG .01720000	.340	.710	.360	.150	10.000
HYDR-1	15	PB .01030000	1.000	.000	.450	2.830	.000

HYDR-1	16	PB	.00870000	1.000	.000	.450	2.850	.000
HYDR-1	17	BB	.25330000	.340	.140	.360	.150	10.000
HYDR-1	18	BB	.08500000	1.000	.000	.450	.300	10.000
HYDR-1	19	BB	.08500000	1.000	.000	.450	.300	10.000
HYDR-1	20	BB	.08110000	.340	.800	.360	.150	10.000
HYDR-1	21	BB	.03500000	1.000	.000	.450	1.430	.000
HYDR-1	22	PB	.00560000	1.000	.000	.450	3.570	.000
HYDR-1	23	CT	.06300000	.340	.380	.360	.150	10.000
HYDR-1	24	PB	.00610000	1.000	.000	.450	3.430	.000
HYDR-1	25	PB	.00350000	1.000	.000	.450	4.500	.000
HYDR-1	26	PB	.00520000	1.000	.000	.450	3.710	.000

ENDATA09

\$\$\$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR-2	2	PR	.18	.000	.000	.000	.000
HYDR-2	3	PB	.18	1.900	.000	.000	.000
HYDR-2	4	PR	.39	4.000	.000	.000	.000
HYDR-2	5	PB	.51	5.300	.000	.000	.000
HYDR-2	6	PB	.53	5.400	.000	.000	.000
HYDR-2	9	PB	.54	5.600	.000	.000	.000
HYDR-2	13	PR	.59	6.000	.000	.000	.000
HYDR-2	15	PB	.67	6.900	.000	.000	.000
HYDR-2	16	PB	.77	7.900	.000	.000	.000
HYDR-2	21	BB	.78	8.000	.000	.000	.000
HYDR-2	22	PB	.78	8.000	.000	.000	.000
HYDR-2	24	PB	.82	8.400	.000	.000	.000
HYDR-2	25	PB	.91	9.300	.000	.000	.000
HYDR-2	26	PB	1.00	10.200	.000	.000	.000

ENDATA10

\$\$\$ DATA TYPE 11 (INITIAL CONDITIONS) \$\$\$

CARD TYPE	REACH ID	TEMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1 PB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	2 PB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	3 PB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	4 PB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	5 PB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	6 PB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	7 AG	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	8 AB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	9 PB	28.10	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	10 SG	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	11 SB	28.10	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	12 FW	28.10	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	13 PB	28.10	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	14 CG	28.10	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	15 PB	28.10	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	16 PB	28.10	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	17 BB	28.10	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	18 BB	28.10	.12	3.00	1.00	1.00	1.00	.00	.00
INITIAL	19 BB	28.10	.12	3.00	1.00	1.00	1.00	.00	.00
INITIAL	20 RB	28.10	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	21 BE	28.10	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	22 PB	28.10	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	23 CT	28.10	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	24 PB	28.10	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	25 PB	28.10	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	26 PB	28.10	.10	3.00	1.00	1.00	1.00	.00	.00

ENDATA11

\$\$\$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AKROB BOD DECAY	BOD SETT	BOD CONV TO SOD	ANAFER BOD DECAY
COEF-1	1 PB	1.	3.190	.000	.000	1.000	.130	.016	.000	.000
COEF-1	2 PB	1.	1.650	.000	.000	1.400	.130	.044	.000	.000
COEF-1	3 PB	1.	1.650	.000	.000	1.400	.130	.044	.000	.000
COEF-1	4 PB	1.	.800	.000	.000	1.000	.130	.086	.000	.000
COEF-1	5 PB	1.	.320	.000	.000	.500	.130	.207	.000	.000
COEF-1	6 PB	1.	.310	.000	.000	.500	.130	.161	.000	.000
COEF-1	7 AG	1.	2.680	.000	.000	1.600	.130	.053	.000	.000
COEF-1	8 AB	1.	2.980	.000	.000	1.000	.130	.028	.000	.000
COEF-1	9 PB	1.	.360	.000	.000	.500	.120	.140	.000	.000
COEF-1	10 SG	1.	3.370	.000	.000	1.600	.130	.060	.000	.000
COEF-1	11 SB	1.	3.340	.000	.000	1.600	.130	.063	.000	.000
COEF-1	12 FW	1.	3.100	.000	.000	1.100	.130	.040	.000	.000
COEF-1	13 PB	1.	.270	.000	.000	.500	.120	.188	.000	.000
COEF-1	14 CG	1.	3.060	.000	.000	1.700	.130	.055	.000	.000
COEF-1	15 PB	1.	.240	.000	.000	.000	.120	.142	.000	.000
COEF-1	16 PB	1.	.240	.000	.000	.000	.120	.143	.000	.000

COEF-1	17	BB	1.	5.440	.000	.000	.000	.000	1.800	.050	.054	.000
COEF-1	18	BB	1.	2.320	.000	.000	.000	.000	1.000	.090	.049	.000
COEF-1	19	BB	1.	2.320	.000	.000	.000	.000	1.000	.090	.049	.000
COEF-1	20	BB	1.	1.700	.000	.000	.000	.000	1.000	.060	.000	.000
COEF-1	21	BB	1.	.470	.000	.000	.000	.000	1.000	.090	.000	.000
COEF-1	22	PB	1.	.190	.000	.000	.000	.000	.000	.120	.179	.000
COEF-1	23	CT	1.	3.380	.000	.000	.000	.000	1.700	.130	.058	.000
COEF-1	24	PB	1.	.200	.000	.000	.000	.000	.000	.120	.172	.000
COEF-1	25	PB	1.	.150	.000	.000	.000	.000	.000	.120	.225	.000
COEF-1	26	PB	1.	.180	.000	.000	.000	.000	.000	.120	.186	.000

ENDATA12

\$\$\$ DATA TYPE 13 (NITROGEN AND PHOSPHORUS COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	ORG-N DECA	ORG-N SETT	ALGAE: CHL A	ALGAE: SETT	ALGAE TO NH3 SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE	MACRO GROW	MACRO RESP
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ENDATA13

\$\$\$ DATA TYPE 14 (ALGAE AND MACROPHYTE COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	SICCHI DEPTH	ALGAE: CHL A	ALGAE: SETT	ALGAE TO SOD	ALGAE GROW	ALGAE GROW	ALGAE RESP	MACRO GROW	MACRO RESP
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ENDATA14

\$\$\$ DATA TYPE 15 (COLIFORM AND NONCONSERVATIVE COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	COLIFORM DIE-OFF	HCM DECA	HCM SETT	HCM CONV TO SOD
COEF-4	1	PB	.00	.10	.02
COEF-4	2	PB	.00	.10	.04
COEF-4	3	PB	.00	.10	.04
COEF-4	4	PB	.00	.10	.09
COEF-4	5	PB	.00	.10	.21
COEF-4	6	PB	.00	.08	.16
COEF-4	7	AG	.00	.13	.05
COEF-4	8	AG	.00	.13	.03
COEF-4	9	PB	.00	.06	.14
COEF-4	10	SG	.00	.13	.06
COEF-4	11	SB	.00	.13	.06
COEF-4	12	BW	.00	.13	.04
COEF-4	13	PB	.00	.13	.13
COEF-4	14	CG	.00	.05	.05
COEF-4	15	PB	.00	.03	.00
COEF-4	16	PB	.00	.03	.00
COEF-4	17	BB	.00	.10	.00
COEF-4	18	BB	.00	.14	.03

COEF-4 19 BB .00 .14 .03 .00
 COEF-4 20 BB .00 .15 .00 .00
 COEF-4 21 BB .00 .15 .00 .00
 COEF-4 22 PB .00 .03 .00 .00
 COEF-4 23 CT .00 .13 .06 .00
 COEF-4 24 PB .00 .03 .00 .00
 COEF-4 25 PB .00 .03 .00 .00
 COEF-4 26 PB .00 .03 .00 .00
 ENDATA15

\$\$\$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) \$\$\$

CARD TYPE:	REACH	ID	OUTFLOW	INFLOW	TEMP	SALIN	CM-I	CM-II	INFLOW/DIST
INCR-1	1	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	2	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	3	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	4	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	5	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	6	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	7	AG	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	8	AB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	9	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	10	SG	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	11	SB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	12	BW	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	13	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	14	CG	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	15	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	16	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	17	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	18	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	19	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	20	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	21	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	22	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	23	CT	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	24	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	25	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	26	PB	.00000	.00000	.00	.00	.00	.00	.00000

ENDATA16

\$\$\$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	REACH	ID	DO	BOD	ORG-N	NH3	NO3+2
INCR-2	1	PB	4.89	4.63	.00	.00	.00
INCR-2	2	PB	4.89	4.63	.00	.00	.00
INCR-2	3	PB	4.89	4.63	.00	.00	.00
INCR-2	4	PB	4.89	4.63	.00	.00	.00
INCR-2	5	PB	4.89	4.63	.00	.00	.00

INCR-2	6	PB	4.89	4.63	.00	.00
INCR-2	7	AG	4.89	4.63	.00	.00
INCR-2	8	AB	4.89	4.63	.00	.00
INCR-2	9	PB	4.89	4.63	.00	.00
INCR-2	10	SG	4.89	4.63	.00	.00
INCR-2	11	SB	4.89	4.63	.00	.00
INCR-2	12	BW	4.89	4.63	.00	.00
INCR-2	13	PB	4.89	4.63	.00	.00
INCR-2	14	CG	4.89	4.63	.00	.00
INCR-2	15	PB	4.89	4.63	.00	.00
INCR-2	16	PB	4.89	4.63	.00	.00
INCR-2	17	BB	4.89	4.63	.00	.00
INCR-2	18	BB	4.89	4.63	.00	.00
INCR-2	19	PB	4.89	4.63	.00	.00
INCR-2	20	BB	4.89	4.63	.00	.00
INCR-2	21	BB	4.89	4.63	.00	.00
INCR-2	22	PB	4.89	4.63	.00	.00
INCR-2	23	CT	4.89	4.63	.00	.00
INCR-2	24	PB	4.89	4.63	.00	.00
INCR-2	25	PB	4.89	4.63	.00	.00
INCR-2	26	PB	4.89	4.63	.00	.00

ENDATA17

\$\$\$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	REACH	ID	PHOS	CHI. A	COLI	NCM
INCR-3	1	PB	.00	.00	.00	6.80
INCR-3	2	PB	.00	.00	.00	6.80
INCR-3	3	PB	.00	.00	.00	6.80
INCR-3	4	PB	.00	.00	.00	6.80
INCR-3	5	PB	.00	.00	.00	6.80
INCR-3	6	PB	.00	.00	.00	6.80
INCR-3	7	AG	.00	.00	.00	6.80
INCR-3	8	AB	.00	.00	.00	6.80
INCR-3	9	PB	.00	.00	.00	6.80
INCR-3	10	SG	.00	.00	.00	6.80
INCR-3	11	SB	.00	.00	.00	6.80
INCR-3	12	BW	.00	.00	.00	6.80
INCR-3	13	PB	.00	.00	.00	6.80
INCR-3	14	CG	.00	.00	.00	6.80
INCR-3	15	PB	.00	.00	.00	6.80
INCR-3	16	PB	.00	.00	.00	6.80
INCR-3	17	BB	.00	.00	.00	6.80
INCR-3	18	BB	.00	.00	.00	6.80
INCR-3	19	BB	.00	.00	.00	6.80
INCR-3	20	BB	.00	.00	.00	6.80
INCR-3	21	BB	.00	.00	.00	6.80
INCR-3	22	PB	.00	.00	.00	6.80
INCR-3	23	CT	.00	.00	.00	6.80
INCR-3	24	PB	.00	.00	.00	6.80
INCR-3	25	PB	.00	.00	.00	6.80
INCR-3	26	PB	.00	.00	.00	6.80

ENDATA18

\$\$\$ DATA TYPE 19 (NONPOINT SOURCE DATA) \$\$\$

CARD TYPE	REACH	ID	BOD	ORG-N	COLL	NCM	DO
NONPOINT	1	PB	3.00	.00	.00	3.00	.00
NONPOINT	2	PB	.70	.00	.00	.00	.00
NONPOINT	3	PB	39.30	.00	.00	.00	.00
NONPOINT	4	PB	120.00	.00	.00	120.00	.00
NONPOINT	5	PB	500.00	.00	.00	500.00	.00
NONPOINT	6	PB	70.00	.00	.00	70.00	.00
NONPOINT	7	AC	.00	.00	.00	.00	.00
NONPOINT	8	AB	3.00	.00	.00	2.00	.00
NONPOINT	9	PR	70.00	.00	.00	70.00	.00
NONPOINT	10	SG	.00	.00	.00	.00	.00
NONPOINT	11	SB	.00	.00	.00	.00	.00
NONPOINT	12	BW	.00	.00	.00	.00	.00
NONPOINT	13	PB	300.00	.00	.00	300.00	.00
NONPOINT	14	CG	1.00	.00	.00	.00	.00
NONPOINT	15	PR	480.00	.00	.00	300.00	.00
NONPOINT	16	PB	565.00	.00	.00	355.00	.00
NONPOINT	17	BB	.00	.00	.00	.00	.00
NONPOINT	18	BB	.00	.00	.00	.00	.00
NONPOINT	19	BB	.00	.00	.00	.00	.00
NONPOINT	20	BB	.00	.00	.00	.00	.00
NONPOINT	21	BB	40.00	.00	.00	140.00	.00
NONPOINT	22	PB	55.00	.00	.00	70.00	.00
NONPOINT	23	CT	.00	.00	.00	.00	.00
NONPOINT	24	PB	270.00	.00	.00	270.00	.00
NONPOINT	25	PB	1000.00	.00	.00	300.00	.00
NONPOINT	26	PB	1000.00	.00	.00	300.00	.00

FNDDATA19

\$\$\$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	B. PLAQUEMINE BRULE	0	.00283	.000	.000	.000	.000
HDWTR-1	105	ATWOOD GULLY	0	.00000	.000	.000	.000	.000
HDWTR-1	143	SILLS GULLY	0	.00283	.000	.000	.000	.000
HDWTR-1	209	CROWLEY HIGH GULLY	0	.00000	.000	.000	.000	.000
HDWTR-1	287	BAYOU BLANC	0	.00283	.000	.000	.000	.000
HDWTR-1	395	N. COULEE TRIEF	0	.00283	.000	.000	.000	.000

ENDATA20

\$\$\$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
HDWTR-2	1	B. PLAQUEMINE BRULE	7.00	9.65	.00	.00	.00
HDWTR-2	105	ATWOOD GULLY	7.00	4.63	.00	.00	.00

HDWTR-2	143	SILLS GULLY	7.00	9.49	.00	.00	.00
HDWTR-2	209	CROWLEY HIGH GULLY	7.00	4.63	.00	.00	.00
HDWTR-2	287	BAYOU BLANC	7.00	13.69	.00	.00	.00
HDWTR-2	395	N. COULEE TRIEF	7.00	9.49	.00	.00	.00

ENDATA21

\$\$\$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
HDWTR-3	1	B. PLAQUEMINE BRULE	.00	.00	.00	7.52
HDWTR-3	105	ATWOOD GULLY	.00	.00	.00	6.80
HDWTR-3	143	SILLS GULLY	.00	.00	.00	1.73
HDWTR-3	209	CROWLEY HIGH GULLY	.00	.00	.00	6.80
HDWTR-3	287	BAYOU BLANC	.00	.00	.00	11.77
HDWTR-3	395	N. COULEE TRIEF	.00	.00	.00	1.73

ENDATA22

\$\$\$ DATA TYPE 23 (JUNCTION DATA) \$\$\$

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	NAME
JUNCTION	141	104	ATWOOD BAYOU CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	205	142	BAYOU WIKOFF CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	228	208	CROWLEY HIGH GULLY CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	390	286	BAYOU BLANC CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	405	394	N. COULEE TRIEF CONFLUENCE WITH BAYOU PLAQUEMINE BRULE

ENDATA23

\$\$\$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	FLOW	TEMP	SAL	CM-I	CM-II
WSTLD-1	18	CHURCH POINT POTW	.04380	.000	.000	.000	.000
WSTLD-1	80	HAZELWOOD GULLY	.00283	.000	.000	.000	.000
WSTLD-1	94	COLES GULLY	.00283	.000	.000	.000	.000
WSTLD-1	102	LONG POINT GULLY	.00283	.000	.000	.000	.000
WSTLD-1	105	ATWOOD ACRES	.00253	.000	.000	.000	.000
WSTLD-1	107	U. ATWOOD BAYOU	.00283	.000	.000	.000	.000
WSTLD-1	143	ACADIAN FINE FOODS	.00138	.000	.000	.000	.000
WSTLD-1	147	U. SILLS BAYOU	.00283	.000	.000	.000	.000
WSTLD-1	150	N. RAYNE POTW	.00189	.000	.000	.000	.000
WSTLD-1	194	U. BAYOU WIKOFF	.00283	.000	.000	.000	.000
WSTLD-1	209	CROWLEY HIGH SCHOOL	.00131	.000	.000	.000	.000
WSTLD-1	247	CROWLEY POTW	.13527	.000	.000	.000	.000
WSTLD-1	287	RAYNE POTW	.08215	.000	.000	.000	.000
WSTLD-1	395	ESTHERWOOD POTW	.00220	.000	.000	.000	.000
WSTLD-1	438	BAYOU JONAS	.00283	.000	.000	.000	.000

ENDATA24

\$\$\$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	ELEMENT	NAME	DO	BOD	% BOD RMVL	ORG-N	NH3	% NITRIF	NO3+2
WSTLD-2	18	CHURCH POINT POTW	5.00	23.00	.00	.00	.00	.00	.00
WSTLD-2	80	HAZELWOOD GULLY	7.00	4.60	.00	.00	.00	.00	.00
WSTLD-2	94	COLES GULLY	7.00	4.60	.00	.00	.00	.00	.00
WSTLD-2	102	LONG POINT GULLY	7.00	4.60	.00	.00	.00	.00	.00
WSTLD-2	105	ATWOOD ACRES	5.00	23.00	.00	.00	.00	.00	.00
WSTLD-2	107	U. ATWOOD BAYOU	7.00	9.50	.00	.00	.00	.00	.00
WSTLD-2	143	ACADIAN FINE FOODS	2.00	46.00	.00	.00	.00	.00	.00
WSTLD-2	147	U. SILLS BAYOU	7.00	9.50	.00	.00	.00	.00	.00
WSTLD-2	150	H. RAYNE POTW	2.00	46.00	.00	.00	.00	.00	.00
WSTLD-2	194	U. BAYOU WIKOFF	7.00	9.50	.00	.00	.00	.00	.00
WSTLD-2	209	CROWLEY HIGH SCHOOL	5.00	23.00	.00	.00	.00	.00	.00
WSTLD-2	247	CROWLEY POTW	6.00	11.50	.00	.00	.00	.00	.00
WSTLD-2	287	RAYNE POTW	5.00	23.00	.00	.00	.00	.00	.00
WSTLD-2	395	ESTHERWOOD POTW	2.00	23.00	.00	.00	.00	.00	.00
WSTLD-2	438	BAYOU JONAS	7.00	4.60	.00	.00	.00	.00	.00
ENDATA25									

\$\$\$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
WSTLD-3	18	CHURCH POINT POTW	.00	.00	.00	8.60
WSTLD-3	80	HAZELWOOD GULLY	.00	.00	.00	6.80
WSTLD-3	94	COLES GULLY	.00	.00	.00	6.80
WSTLD-3	102	LONG POINT GULLY	.00	.00	.00	6.80
WSTLD-3	105	ATWOOD ACRES	.00	.00	.00	21.50
WSTLD-3	107	U. ATWOOD BAYOU	.00	.00	.00	1.70
WSTLD-3	143	ACADIAN FINE FOODS	.00	.00	.00	43.00
WSTLD-3	147	U. SILLS BAYOU	.00	.00	.00	43.00
WSTLD-3	150	H. RAYNE POTW	.00	.00	.00	1.70
WSTLD-3	194	U. BAYOU WIKOFF	.00	.00	.00	21.50
WSTLD-3	209	CROWLEY HIGH SCHOOL	.00	.00	.00	8.60
WSTLD-3	247	CROWLEY POTW	.00	.00	.00	21.50
WSTLD-3	287	RAYNE POTW	.00	.00	.00	43.00
WSTLD-3	395	ESTHERWOOD POTW	.00	.00	.00	6.80
WSTLD-3	438	BAYOU JONAS	.00	.00	.00	6.80
ENDATA26						

\$\$\$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) \$\$\$

CARD TYPE	CONSTITUENT	CONCENTRATION
LOWER BC	TEMPERATURE	= 23.230 DEG C
LOWER BC	SALINITY	= .900 PPT
LOWER BC	CONSERVATIVE MATERIAL I	= .000 MG/L
LOWER BC	CONSERVATIVE MATERIAL II	= .000 MG/L

LOWER BC	DISSOLVED OXYGEN	=	4.310	MG/L
LOWER BC	BIOCHEMICAL OXYGEN DEMAND	=	5.730	MG/L
LOWER BC	ORGANIC NITROGEN	=	.000	MG/L
LOWER BC	AMMONIA NITROGEN	=	.000	MG/L
LOWER BC	NITRATE/NITRITE NITROGEN	=	.000	MG/L
LOWER BC	PHOSPHORUS	=	.000	MG/L
LOWER BC	CHLOROPHYLL A	=	.000	UG/L
LOWER BC	COLIFORM	=	.000	#/100 ML
LOWER BC	NONCONSERVATIVE MATERIAL	=	5.960	MG/L

ENDATA27

\$\$\$ DATA TYPE 28 (FLOW AUGMENTATION DATA) \$\$\$

CARD TYPE:	REACH	AVAIL HDMS	TARGET	ORDR OF AVAIL SOURCES
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ENDATA28

\$\$\$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) \$\$\$

CARD TYPE:	PARAMETER	COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7	COL 8
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ENDATA29

\$\$\$ DATA TYPE 30 (PLOT CONTROL CARDS) \$\$\$

NUMBER OF PLOTS =	4
NUMBER OF REACHES IN PLOT 1 =	2
INCREMENT =	.10
PLOT RCH	7
NUMBER OF REACHES IN PLOT 2 =	3
INCREMENT =	.20
PLOT RCH	10 11 12
NUMBER OF REACHES IN PLOT 3 =	1
INCREMENT =	.10
PLOT RCH	14
NUMBER OF REACHES IN PLOT 4 =	1
INCREMENT =	.10
PLOT RCH	23

ENDATA30

.....NO ERRORS DETECTED IN INPUT DATA
.....HYDRAULIC CALCULATIONS COMPLETED
.....TRIDIAGONAL MATRIX TERMS INITIALIZED
.....OXYGEN DEPENDENT RATES CONVERGENT IN 1 ITERATIONS
.....CONSTITUENT CALCULATIONS COMPLETED

I INTERMEDIATE REPORT
DISSOLVED OXYGEN
MG/L

BAYOU PLAQUEMINE BRUILE WATERSHED
SUMMER PROJECTION RUN

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	1	1	5.89	5.42	5.17	5.03	4.96	4.91	4.89	4.87	4.86	4.85
PB	1	11	4.84	4.84	4.83	4.83	4.81	4.78	4.82	4.97	4.97	4.92
PB	2	21	4.30	3.60	3.41	3.28	3.19	3.14	3.12	3.11	3.12	3.14
PB	3	22	3.86	3.20	3.24	3.28	3.33	3.37	3.41	3.46	3.50	3.55
PB	3	32	3.17	3.63	3.67	3.71	3.75	3.79	3.82	3.85	3.89	3.92
PB	3	42	3.59	3.98	4.01	4.03	4.06	4.09	4.11	4.13	4.15	4.18
PB	3	52	3.95	4.22	4.23	4.25	4.27	4.29	4.30	4.32	4.33	4.35
PB	3	62	4.20	4.37	4.39	4.40	4.41	4.42	4.44	4.47	4.54	4.55
PB	3	72	4.36	4.54	4.54	4.55	4.55	4.55	4.55	4.55	4.55	4.55
PB	4	81	4.54	4.53	4.48	4.20	4.41	4.42	4.44	4.47	4.54	4.55
PB	4	91	4.55	4.53	4.48	4.20	4.41	4.42	4.44	4.47	4.54	4.55
PB	4	91	4.55	4.53	4.48	4.20	4.41	4.42	4.44	4.47	4.54	4.55
PB	5	95	3.83	3.72	3.66	3.62	3.58	3.52	3.43	3.31		
PB	6	103	3.27	3.28								
PB	9	111	3.36	3.35								
PB	13	205	3.27	3.18	3.15	3.21	3.47	3.48	3.50	3.50	3.51	3.52
PB	15	228	3.35	3.39	3.42	3.45	3.55	3.56	3.58	3.61	3.64	3.69
PB	15	238	3.52	3.52	3.53	3.54	3.60	3.61	3.61	3.72	3.74	3.76
PB	15	248	3.66	3.63	3.62	3.61	3.67	3.69	3.71	3.88	3.89	3.90
PB	16	255	3.62	3.63	3.65	3.66	3.84	3.85	3.87	3.89	3.87	3.84
PB	16	265	3.77	3.79	3.81	3.82	3.84	3.85	3.87	3.89	3.87	3.84
PB	16	275	3.91	3.92	3.92	3.92	3.92	3.92	3.91	3.89	3.87	3.84
PB	16	285	3.80	3.75	3.72	3.73	3.73	3.77	3.77	3.78	3.78	3.78
PB	22	390	3.71	3.72	3.72	3.73	3.73	3.77	3.77	3.78	3.78	3.78
PB	24	405	3.74	3.75	3.75	3.76	3.76	3.79	3.79	3.78	3.78	3.78
PB	24	415	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.78	3.78	3.78
PB	24	425	3.77	3.76	3.75	3.74	3.73	3.71	3.70	3.68		
PB	25	433	3.61	3.57	3.55	3.54	3.54	3.56	3.70			
PB	26	439	3.66	3.72	3.78	3.84	3.95	4.13				
AG	7	105	3.04	3.18	4.75	4.80	4.85	4.89	4.93	4.96	5.00	5.03
AB	8	107	4.66	4.71	5.12	5.14	5.17	5.19	5.21	5.23	5.24	5.26
AB	8	117	5.06	5.09	5.29	5.30	5.33	5.34	5.35	5.36	5.37	5.37
AB	8	127	5.28	5.29	4.96	5.32	5.33	5.34	5.35	5.36	5.37	5.37
AB	8	137	5.36	5.29	4.96	5.32	5.33	5.34	5.35	5.36	5.37	5.37
SG	10	143	4.40	3.97	3.74	3.80	3.96	4.13	4.24	4.32	4.41	4.50
SB	11	147	4.41	4.16	3.88	3.46	3.36	3.29	3.24	3.22	3.20	3.20
SB	11	157	3.20	3.21	3.23	3.25	3.27	3.30	3.33	3.36	3.38	3.41
SB	11	167	3.44	3.47	3.50	3.53	3.56	3.59	3.61	3.64	3.67	3.69
SB	11	177	3.72	3.74	3.77	3.79	3.81	3.83	3.86	3.88	3.90	3.92
SB	11	187	3.94	3.95	3.97	3.99	4.01	4.05	4.12	4.18	4.24	4.30
BW	12	194	5.03	5.18	5.28	5.35	5.41	5.45	5.49	5.52	5.55	5.53
BW	12	204	3.72	3.13	3.14	3.22	3.33	3.42	3.50	3.57	3.63	3.68
CG	14	209	3.39	3.76	3.79	3.82	3.84	3.85	3.85	3.79	3.86	3.90
CG	14	219	3.72	3.76	3.79	3.82	3.84	3.85	3.85	3.79	3.86	3.90
BB	17	287	5.04	5.02	5.00	4.98	4.96	4.95	4.94	4.92	4.91	4.90
BB	17	297	4.89	4.88	4.87	4.86	4.86	4.85	4.84	4.84	4.83	4.82
BB	17	307	4.82	4.81	4.79	4.74	4.59	4.85	4.84	4.84	4.83	4.82
BB	18	312	4.19	3.95	3.79	3.71	3.71	3.79	3.71	3.71	3.71	3.71
BB	19	316	3.67	3.66	3.68	3.71	3.74	3.71	3.68	3.66	3.66	3.66

BB	20	321	3.73	3.74	3.75	3.76	3.78	3.81	3.83	3.86	3.89	3.93
BB	20	331	3.96	4.00	4.03	4.07	4.10	4.14	4.17	4.21	4.24	4.28
BB	20	341	4.31	4.34	4.38	4.41	4.44	4.47	4.50	4.53	4.56	4.59
BB	20	351	4.62	4.65	4.67	4.70	4.72	4.75	4.77	4.80	4.82	4.85
BB	20	361	4.87	4.89	4.91	4.93	4.95	4.97	4.99	5.01	5.03	5.04
BB	20	371	5.02	4.86	3.99	3.37	3.32	3.30	3.27	3.25	3.23	3.20
BB	21	374	3.68	3.53	3.43	3.16	3.28	3.57	3.03	3.07	3.24	3.74
BB	21	384	3.17	3.14	3.12	3.20	3.10	3.04	3.03	3.07	3.24	3.74
CT	23	395	4.00	3.62	3.37	3.20	3.10	3.04	3.03	3.07	3.24	3.74

1 INTERMEDIATE REPORT
 BIOCHEMICAL OXYGEN DEMAND
 MG/L

BAYOU PLAQUEMINE BRUIE WATERSHED
 SUMMER PROJECTION RUN

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	1	1	9.6	9.5	9.5	9.4	9.4	9.4	9.3	9.3	9.3	9.2
PE	1	11	9.2	9.2	9.2	9.2	9.4	9.4	9.3	9.3	9.3	9.2
PB	2	21	19.7									
PB	3	22	18.8	18.1	17.5	16.9	16.3	15.8	15.2	14.7	14.3	13.8
PE	3	32	13.4	12.9	12.5	12.1	11.8	11.4	11.1	10.7	10.4	10.1
PB	3	42	9.9	9.6	9.3	9.1	8.8	8.6	8.4	8.2	8.0	7.8
PB	3	52	7.6	7.4	7.3	7.1	6.9	6.8	6.7	6.5	6.4	6.3
PE	3	62	6.2	6.0	5.9	5.8	5.7	5.6	5.5	5.5	5.4	5.3
PE	3	72	5.2	5.2	5.1	5.0	4.9	4.9	4.8	4.8	4.8	4.8
PB	4	81	3.8	3.5	3.3	3.1	3.0	3.0	3.0	2.9	2.9	2.9
PE	4	91	2.9	2.9	3.0	3.3	3.6	3.7	3.8	4.0		
PE	5	95	3.5	3.6	3.6	3.6	3.6	3.7	3.8	4.0		
PB	6	103	4.3	4.4								
PB	9	141	4.5	4.5								
PB	13	205	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4
PB	15	228	4.3	4.3	4.3	4.3	4.6	4.7	4.8	4.9	5.0	5.1
PB	15	238	4.4	4.5	4.5	4.6	4.6	4.6	4.3	3.8	3.8	3.8
PB	15	248	5.0	4.9	4.7	4.6	4.5	4.4	4.3	3.9	3.5	3.5
PE	16	255	4.2	4.2	4.1	4.0	4.0	3.9	3.6	3.5	3.5	3.5
PB	16	265	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.3	3.2	3.2
PB	16	275	3.5	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.2	3.2
PE	16	285	3.1	3.1	3.4	3.4	3.4	3.4	3.3	3.3	3.2	3.2
PE	22	390	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.8
PB	24	405	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8
PB	24	415	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
PB	24	425	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
PE	25	433	2.7	2.7	2.7	2.8	2.9	3.0	3.0	3.0	3.0	3.0
PB	26	439	3.4	3.8	4.1	4.4	4.8	5.3	5.3	5.3	5.3	5.3
AG	7	105	15.5	11.9								
AB	8	107	10.4	9.8	9.3	8.8	8.3	7.9	7.5	7.1	6.8	6.5
AB	8	117	6.2	5.9	5.7	5.4	5.2	5.0	4.8	4.7	4.5	4.3
AB	8	127	4.2	4.1	4.0	3.8	3.7	3.6	3.6	3.5	3.4	3.3
AB	8	137	3.3	3.3	3.6	4.5	3.7	3.6	3.6	3.5	3.4	3.3
SG	10	143	19.8	18.8	17.6	16.0	16.0	17.6	17.0	16.4	15.9	15.4
SB	11	147	13.8	13.9	13.9	13.5	13.0	12.6	12.2	11.8	11.4	11.1
SB	11	157	14.9	14.4	14.9	14.5	14.4	14.4	14.4	14.4	14.4	14.4
SB	11	167	10.7	10.4	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.9
SD	11	177	7.7	7.4	7.2	7.0	6.7	6.5	6.3	6.1	5.9	5.7
SB	11	187	5.5	5.3	5.2	5.0	4.8	4.7	4.6	4.6	4.6	4.6

ID	RC#	ELF#	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB 16	285	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB 22	390	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB 24	405	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB 24	415	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB 24	425	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB 25	433	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
PB 26	439	.2	.4	.5	.6	.8	.9	.9	.9	.9	.9	.9
AG 7	105	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB 8	107	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB 8	117	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB 8	127	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
AB 8	137	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SY 10	143	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB 11	147	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB 11	157	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB 11	167	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB 11	177	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB 11	187	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
SB 11	194	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BW 12	204	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
CG 14	209	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
CG 14	219	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 17	287	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BR 17	297	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 17	307	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 18	312	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 19	316	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 20	321	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 20	331	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 20	341	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 20	351	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 20	361	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BR 20	371	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 21	374	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
BB 21	384	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
CT 23	395	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1

LIMIT/MEDIATE. REPORT

NBOD
MG/L

BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUN

ID	RC#	ELF#	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB 1	1	7.80	8.00	8.20	8.39	8.57	8.74	8.90	8.90	9.06	9.21	9.35
PB 1	11	9.48	9.61	9.73	9.84	9.91	9.82	8.93	8.93	8.52	8.39	8.26
PB 2	21	7.94	7.36	7.12	6.88	6.65	6.43	6.22	6.22	6.01	5.81	5.62
PB 3	22	7.61	5.26	5.08	4.91	4.75	4.59	4.44	4.44	4.30	4.15	4.02
PB 3	32	5.44	3.88	3.63	3.51	3.39	3.28	3.17	3.17	3.07	2.97	2.87
PB 3	42	3.88	2.77	2.59	2.51	2.42	2.34	2.27	2.27	2.19	2.12	2.05
PB 3	52	2.77	1.98	1.85	1.79	1.73	1.67	1.62	1.62	1.57	1.51	1.46
PB 3	62	1.98	1.42	1.37	1.29	1.25	1.24	1.24	1.24	1.42	1.86	1.46
PB 3	72	1.42	2.25	2.78	2.92	3.01	3.08	3.12	3.12	3.15	3.17	3.18
PB 4	81	2.25	3.18	3.14	3.00	2.79	2.84	2.97	2.97	3.31	3.17	3.18
PB 4	91	3.18	2.79	2.77	2.77	2.77	2.84	2.97	2.97	3.31	3.17	3.18
PB 5	95	2.84	2.79	2.77	2.77	2.77	2.84	2.97	2.97	3.31	3.17	3.18

PB	6	103	3.87	4.14	5.77	6.34	7.54	7.68	7.81	7.93	8.05	8.15
PB	9	141	4.82	4.82	7.39	7.39	8.58	8.64	8.70	8.75	8.79	8.83
PB	13	205	5.07	5.39	7.23	7.39	8.51	8.64	8.70	8.75	8.79	8.83
PB	15	228	6.88	7.06	8.43	8.51	8.97	8.98	8.99	8.99	8.99	8.99
PB	15	238	8.25	8.35	8.87	8.90	8.97	8.96	8.95	8.94	8.93	8.92
PB	15	248	8.99	8.98	8.98	8.98	8.82	8.80	8.77	8.74	8.70	8.66
PB	16	255	8.99	8.89	8.87	8.85	8.82	8.80	8.77	8.74	8.70	8.66
PB	16	265	8.99	8.89	8.87	8.85	8.82	8.80	8.77	8.74	8.70	8.66
PB	16	275	8.62	8.58	8.53	8.47	8.41	8.34	8.27	8.20	8.11	8.02
PB	16	285	7.92	7.81	7.77	7.78	7.79	7.74	7.73	7.71	7.68	7.65
PB	22	390	7.73	7.76	7.77	7.78	7.76	7.74	7.73	7.71	7.68	7.65
PB	24	405	7.79	7.79	7.78	7.77	7.76	7.74	7.73	7.71	7.68	7.65
PB	24	415	7.62	7.59	7.55	7.51	7.47	7.42	7.37	7.31	7.25	7.19
PB	24	425	7.12	7.05	6.97	6.89	6.80	6.71	6.61	6.51	6.41	6.31
PB	25	433	6.18	5.76	5.45	5.24	5.12	5.11	5.11	5.11	5.11	5.11
PB	26	439	5.21	5.35	5.49	5.64	5.78	5.91	6.04	6.17	6.29	6.41
AG	7	105	15.44	11.45	6.79	6.50	6.23	5.97	5.73	5.51	5.30	5.10
AB	8	107	7.42	7.10	4.57	4.41	4.26	4.13	4.00	3.87	3.76	3.65
AB	8	117	4.91	4.73	3.36	3.28	3.20	3.13	3.06	2.99	2.93	2.89
AB	8	127	3.55	3.45	2.96	2.88	2.80	2.73	2.66	2.59	2.53	2.47
AB	8	137	2.88	2.96	2.49	2.41	2.34	2.27	2.20	2.13	2.06	1.99
SG	10	143	14.50	13.93	13.14	11.60	10.69	10.03	9.44	8.86	8.28	7.70
SB	11	147	8.77	9.15	10.69	15.04	14.74	14.44	14.15	13.87	13.59	13.32
SB	11	157	13.05	12.79	12.53	12.28	12.03	11.79	11.56	11.32	11.10	10.87
SB	11	167	10.66	10.44	10.23	10.03	9.83	9.63	9.44	9.25	9.06	8.88
SB	11	177	8.70	8.53	8.36	8.19	8.02	7.86	7.70	7.55	7.40	7.25
SB	11	187	7.10	6.96	6.82	6.68	6.53	6.37	6.14	5.93	5.72	5.51
DW	12	194	4.46	3.83	3.28	2.82	2.42	2.08	1.78	1.53	1.32	1.30
BW	12	204	4.70	4.70	16.06	14.77	13.58	12.49	11.49	10.57	9.72	8.94
CC	14	209	18.99	17.46	6.95	6.40	5.90	5.49	5.23	5.40	6.86	8.32
CG	14	219	8.22	7.56	21.02	20.98	20.93	20.89	20.84	20.80	20.76	20.71
BB	17	287	21.11	21.06	20.58	20.54	20.50	20.45	20.41	20.37	20.33	20.28
BB	17	297	20.67	20.63	20.58	20.54	20.50	20.45	20.41	20.37	20.33	20.28
BB	17	307	20.23	20.18	20.10	19.95	19.59	19.23	18.87	18.51	18.15	17.79
BB	18	312	18.74	17.97	17.24	16.53	15.82	15.11	14.40	13.69	12.98	12.27
BB	19	316	15.85	15.21	14.61	14.06	13.62	13.18	12.74	12.30	11.86	11.42
BB	20	321	13.31	12.97	12.65	12.33	12.02	11.72	11.43	11.14	10.87	10.59
BB	20	331	10.33	10.07	9.82	9.57	9.33	9.10	8.87	8.65	8.44	8.22
BB	20	341	8.02	7.82	7.62	7.43	7.25	7.07	6.89	6.72	6.55	6.38
BB	20	351	6.23	6.07	5.92	5.77	5.63	5.48	5.35	5.21	5.08	4.96
BB	20	361	4.83	4.71	4.59	4.48	4.37	4.26	4.15	4.05	3.95	3.84
BB	20	371	3.74	3.60	3.55	3.48	3.41	3.34	3.28	3.22	3.16	3.10
BB	21	374	3.29	3.27	3.25	3.23	3.21	3.19	3.17	3.15	3.13	3.11
BB	21	384	3.94	4.26	4.71	5.33	6.18	7.34	8.80	10.26	11.71	13.16
CT	23	395	18.90	18.34	17.78	17.24	16.71	16.16	15.52	14.59	12.71	7.84

1. CAPSULE SUMMARY
 B. PLAQUEMINE BRÛLÉ

DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD ORGN MG/L	NH3 CHLA UG/L	REAER CBOD		NH3 DECA 1/DA	SOD 1/DA		
							CBOD 1/DA	SETT 1/DA				
H1WTR	.003	.0	.0	7.0	9.6	.0	.0	3.71	.19	.07	.00	1.67
70.00	.003	28.1	.1	5.9	9.6	.0	1.0	3.71	.19	.07	.00	1.67
69.80	.003	28.1	.1	5.4	9.5	.0	1.0	3.71	.19	.07	.00	1.67
69.60	.003	28.1	.1	5.2	9.5	.0	1.0	3.71	.19	.07	.00	1.67
69.40	.003	28.1	.1	5.0	9.4	.0	1.0	3.71	.19	.07	.00	1.67
69.20	.003	28.1	.1	5.0	9.4	.0	1.0	3.71	.19	.07	.00	1.67
69.00	.003	28.1	.1	4.9	9.4	.0	1.0	3.71	.19	.07	.00	1.67
68.80	.003	28.1	.1	4.9	9.3	.0	1.0	3.71	.19	.07	.00	1.67
68.60	.003	28.1	.1	4.9	9.3	.0	1.0	3.71	.19	.07	.00	1.67
68.40	.003	28.1	.1	4.9	9.3	.0	1.0	3.71	.19	.07	.00	1.67
68.20	.003	28.1	.1	4.9	9.2	.0	1.0	3.71	.19	.07	.00	1.67
68.00	.003	28.1	.1	4.8	9.2	.0	1.0	3.71	.19	.07	.00	1.67
67.80	.003	28.1	.1	4.8	9.2	.0	1.0	3.71	.19	.07	.00	1.67
67.60	.003	28.1	.1	4.8	9.2	.0	1.0	3.71	.19	.07	.00	1.67
67.40	.003	28.1	.1	4.8	9.2	.0	1.0	3.71	.19	.07	.00	1.67
67.20	.003	28.1	.1	4.8	9.4	.0	1.0	3.71	.19	.07	.00	1.67
67.00	.003	28.1	.1	4.8	10.9	.0	1.0	3.71	.19	.07	.00	1.67
66.80	.003	28.1	.1	4.8	18.3	.0	1.0	3.71	.19	.07	.00	1.67
66.60	.047	28.1	.1	5.0	21.4	.0	1.0	3.71	.19	.05	.00	1.67
66.40	.047	28.1	.1	5.0	21.0	.0	1.0	3.71	.19	.05	.00	1.67
66.20	.047	28.1	.1	4.9	20.5	.0	1.0	3.71	.19	.05	.00	1.67
66.00	.047	28.1	.1	4.3	19.7	.0	1.0	1.92	.19	.10	.00	2.33
65.80	.047	28.1	.1	3.9	18.8	.0	1.0	1.92	.19	.10	.00	2.33
65.60	.047	28.1	.1	3.6	18.1	.0	1.0	1.92	.19	.10	.00	2.33
65.40	.047	28.1	.1	3.4	17.5	.0	1.0	1.92	.19	.10	.00	2.33
65.20	.047	28.1	.1	3.3	16.9	.0	1.0	1.92	.19	.10	.00	2.33
65.00	.047	28.1	.1	3.2	16.3	.0	1.0	1.92	.19	.10	.00	2.33
64.80	.047	28.1	.1	3.1	15.8	.0	1.0	1.92	.19	.10	.00	2.33
64.60	.047	28.1	.1	3.1	15.2	.0	1.0	1.92	.19	.10	.00	2.33
64.40	.047	28.1	.1	3.1	14.7	.0	1.0	1.92	.19	.10	.00	2.33
64.20	.047	28.1	.1	3.1	14.3	.0	1.0	1.92	.19	.10	.00	2.33
64.00	.047	28.1	.1	3.1	13.8	.0	1.0	1.92	.19	.10	.00	2.33
63.80	.047	28.1	.1	3.2	13.4	.0	1.0	1.92	.19	.10	.00	2.33
63.60	.047	28.1	.1	3.2	12.9	.0	1.0	1.92	.19	.10	.00	2.33
63.40	.047	28.1	.1	3.2	12.5	.0	1.0	1.92	.19	.10	.00	2.33
63.20	.047	28.1	.1	3.3	12.1	.0	1.0	1.92	.19	.10	.00	2.33
63.00	.047	28.1	.1	3.3	11.8	.0	1.0	1.92	.19	.10	.00	2.33
62.80	.047	28.1	.1	3.4	11.4	.0	1.0	1.92	.19	.10	.00	2.33
62.60	.047	28.1	.1	3.4	11.1	.0	1.0	1.92	.19	.10	.00	2.33
62.40	.047	28.1	.1	3.5	10.7	.0	1.0	1.92	.19	.10	.00	2.33
62.20	.047	28.1	.1	3.5	10.4	.0	1.0	1.92	.19	.10	.00	2.33
62.00	.047	28.1	.1	3.5	10.1	.0	1.0	1.92	.19	.10	.00	2.33
61.80	.047	28.1	.1	3.6	9.9	.0	1.0	1.92	.19	.10	.00	2.33
61.60	.047	28.1	.1	3.6	9.6	.0	1.0	1.92	.19	.10	.00	2.33
61.40	.047	28.1	.1	3.7	9.3	.0	1.0	1.92	.19	.10	.00	2.33
61.20	.047	28.1	.1	3.7	9.1	.0	1.0	1.92	.19	.10	.00	2.33
61.00	.047	28.1	.1	3.7	8.8	.0	1.0	1.92	.19	.10	.00	2.33

60.80	.047 28.1	.1	3.8	8.6	.0	1.0	.0	1.92	.19	.10	.00	2.33
60.60	.047 28.1	.1	3.8	8.4	.0	1.0	.0	1.92	.19	.10	.00	2.33
60.40	.047 28.1	.1	3.9	8.2	.0	1.0	.0	1.92	.19	.10	.00	2.33
60.20	.047 28.1	.1	3.9	8.0	.0	1.0	.0	1.92	.19	.10	.00	2.33
60.00	.047 28.1	.1	3.9	7.8	.0	1.0	.0	1.92	.19	.10	.00	2.33
59.80	.047 28.1	.1	3.9	7.6	.0	1.0	.0	1.92	.19	.10	.00	2.33
59.60	.047 28.1	.1	4.0	7.4	.0	1.0	.0	1.92	.19	.10	.00	2.33
59.40	.047 28.1	.1	4.0	7.3	.0	1.0	.0	1.92	.19	.10	.00	2.33
59.20	.047 28.1	.1	4.0	7.1	.0	1.0	.0	1.92	.19	.10	.00	2.33
59.00	.047 28.1	.1	4.1	6.9	.0	1.0	.0	1.92	.19	.10	.00	2.33
58.80	.047 28.1	.1	4.1	6.8	.0	1.0	.0	1.92	.19	.10	.00	2.33
58.60	.047 28.1	.1	4.1	6.7	.0	1.0	.0	1.92	.19	.10	.00	2.33
58.40	.047 28.1	.1	4.1	6.5	.0	1.0	.0	1.92	.19	.10	.00	2.33
58.20	.047 28.1	.1	4.2	6.4	.0	1.0	.0	1.92	.19	.10	.00	2.33
58.00	.047 28.1	.1	4.2	6.3	.0	1.0	.0	1.92	.19	.10	.00	2.33
57.80	.047 28.1	.1	4.2	6.2	.0	1.0	.0	1.92	.19	.10	.00	2.33
57.60	.047 28.1	.1	4.2	6.0	.0	1.0	.0	1.92	.19	.10	.00	2.33
57.40	.047 28.1	.1	4.2	5.9	.0	1.0	.0	1.92	.19	.10	.00	2.33
57.20	.047 28.1	.1	4.3	5.8	.0	1.0	.0	1.92	.19	.10	.00	2.33
57.00	.047 28.1	.1	4.3	5.7	.0	1.0	.0	1.92	.19	.10	.00	2.33
56.80	.047 28.1	.1	4.3	5.6	.0	1.0	.0	1.92	.19	.10	.00	2.33
56.60	.047 28.1	.1	4.3	5.5	.0	1.0	.0	1.92	.19	.10	.00	2.33
56.40	.047 28.1	.1	4.3	5.5	.0	1.0	.0	1.92	.19	.10	.00	2.33
56.20	.047 28.1	.1	4.3	5.4	.0	1.0	.0	1.92	.19	.10	.00	2.33
56.00	.047 28.1	.1	4.3	5.3	.0	1.0	.0	1.92	.19	.10	.00	2.33
55.80	.047 28.1	.1	4.4	5.2	.0	1.0	.0	1.92	.19	.10	.00	2.33
55.60	.047 28.1	.1	4.4	5.2	.0	1.0	.0	1.92	.19	.10	.00	2.33
55.40	.047 28.1	.1	4.4	5.1	.0	1.0	.0	1.92	.19	.10	.00	2.33
55.20	.047 28.1	.1	4.4	5.0	.0	1.0	.0	1.92	.19	.10	.00	2.33
55.00	.047 28.1	.1	4.4	4.9	.0	1.0	.0	1.92	.19	.10	.00	2.33
54.80	.047 28.1	.1	4.4	4.9	.0	1.0	.0	1.92	.19	.10	.00	2.33
54.60	.047 28.1	.1	4.4	4.8	.0	1.0	.0	1.92	.19	.10	.00	2.33
54.40	.047 28.1	.1	4.5	4.6	.0	1.0	.0	1.92	.19	.10	.00	2.33
54.20	.049 28.1	.1	4.5	4.3	.0	1.0	.0	1.92	.19	.10	.00	2.33
53.20	.049 28.1	.1	4.5	3.8	.0	1.0	.0	.93	.19	.10	.00	1.67
52.20	.049 28.1	.1	4.5	3.5	.0	1.0	.0	.93	.19	.10	.00	1.67
51.20	.049 28.1	.1	4.5	3.3	.0	1.0	.0	.93	.19	.10	.00	1.67
50.20	.049 28.1	.1	4.5	3.1	.0	1.0	.0	.93	.19	.10	.00	1.67
49.20	.049 28.1	.1	4.5	3.0	.0	1.0	.0	.93	.19	.10	.00	1.67
48.20	.049 28.1	.1	4.5	3.0	.0	1.0	.0	.93	.19	.10	.00	1.67
47.20	.049 28.1	.1	4.5	3.0	.0	1.0	.0	.93	.19	.10	.00	1.67
46.20	.049 28.1	.1	4.5	2.9	.0	1.0	.0	.93	.19	.10	.00	1.67
45.20	.049 28.1	.1	4.5	2.9	.0	1.0	.0	.93	.19	.10	.00	1.67
44.20	.049 28.1	.1	4.5	2.9	.0	1.0	.0	.93	.19	.10	.00	1.67
43.20	.049 28.1	.1	4.5	2.9	.0	1.0	.0	.93	.19	.10	.00	1.67
42.20	.049 28.1	.1	4.5	2.9	.0	1.0	.0	.93	.19	.10	.00	1.67
41.20	.049 28.1	.1	4.5	3.0	.0	1.0	.0	.93	.19	.10	.00	1.67
40.20	.052 28.1	.1	4.2	3.3	.0	1.0	.0	.93	.19	.10	.00	1.67
39.20	.052 28.1	.1	3.8	3.5	.0	1.0	.0	.37	.19	.10	.00	.83
38.20	.052 28.1	.1	3.7	3.6	.0	1.0	.0	.37	.19	.10	.00	.83
37.20	.052 28.1	.1	3.7	3.6	.0	1.0	.0	.37	.19	.10	.00	.83
36.20	.052 28.1	.1	3.6	3.6	.0	1.0	.0	.37	.19	.10	.00	.83
35.20	.052 28.1	.1	3.6	3.6	.0	1.0	.0	.37	.19	.10	.00	.83
34.20	.052 28.1	.1	3.5	3.7	.0	1.0	.0	.37	.19	.10	.00	.83
33.20	.052 28.1	.1	3.4	3.8	.0	1.0	.0	.37	.19	.10	.00	.83

32.20	.055	28.1	.1	3.3	4.0	.0	1.0	.0	.37	.19	.10	.00	.83
31.80	.055	28.1	.1	3.3	4.3	.0	1.0	.0	.36	.19	.08	.00	.83
31.40	.055	28.1	.1	3.3	4.4	.0	1.0	.0	.36	.19	.08	.00	.83
30.85	.060	28.1	.1	3.4	4.5	.0	1.0	.0	.42	.17	.08	.00	.83
30.30	.060	28.1	.1	3.3	4.5	.0	1.0	.0	.42	.17	.08	.00	.83
29.50	.072	28.1	.1	3.3	4.3	.0	1.0	.0	.31	.17	.08	.00	.83
28.70	.072	28.1	.1	3.1	4.3	.0	1.0	.0	.31	.17	.08	.00	.83
27.90	.072	28.1	.1	3.1	4.3	.0	1.0	.0	.31	.17	.08	.00	.83
27.10	.072	28.1	.1	3.2	4.3	.0	1.0	.0	.31	.17	.08	.00	.83
26.90	.074	28.1	.1	3.4	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
26.70	.074	28.1	.1	3.4	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
26.50	.074	28.1	.1	3.4	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
26.30	.074	28.1	.1	3.4	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
26.10	.074	28.1	.1	3.5	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
25.90	.074	28.1	.1	3.5	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
25.70	.074	28.1	.1	3.5	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
25.50	.074	28.1	.1	3.5	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
25.30	.074	28.1	.1	3.5	4.4	.0	1.0	.0	.28	.17	.05	.00	.00
25.10	.074	28.1	.1	3.5	4.4	.0	1.0	.0	.28	.17	.05	.00	.00
24.90	.074	28.1	.1	3.5	4.4	.0	1.0	.0	.28	.17	.05	.00	.00
24.70	.074	28.1	.1	3.5	4.5	.0	1.0	.0	.28	.17	.05	.00	.00
24.50	.074	28.1	.1	3.5	4.5	.0	1.0	.0	.28	.17	.05	.00	.00
24.30	.074	28.1	.1	3.5	4.6	.0	1.0	.0	.28	.17	.05	.00	.00
24.10	.074	28.1	.1	3.5	4.6	.0	1.0	.0	.28	.17	.05	.00	.00
23.90	.074	28.1	.1	3.6	4.7	.0	1.0	.0	.28	.17	.05	.00	.00
23.70	.074	28.1	.1	3.6	4.8	.0	1.0	.0	.28	.17	.05	.00	.00
23.50	.074	28.1	.1	3.6	4.9	.0	1.0	.0	.28	.17	.05	.00	.00
23.30	.074	28.1	.1	3.6	5.0	.0	1.0	.0	.28	.17	.05	.00	.00
23.10	.209	28.1	.1	3.7	5.1	.0	1.0	.0	.28	.17	.05	.00	.00
22.90	.209	28.1	.1	3.6	4.9	.0	1.0	.0	.28	.17	.05	.00	.00
22.70	.209	28.1	.1	3.6	4.7	.0	1.0	.0	.28	.17	.05	.00	.00
22.50	.209	28.1	.1	3.6	4.6	.0	1.0	.0	.28	.17	.05	.00	.00
22.30	.209	28.1	.1	3.6	4.6	.0	1.0	.0	.28	.17	.05	.00	.00
22.10	.209	28.1	.1	3.6	4.5	.0	1.0	.0	.28	.17	.05	.00	.00
21.90	.209	28.1	.1	3.6	4.4	.0	1.0	.0	.28	.17	.05	.00	.00
21.70	.209	28.1	.1	3.6	4.3	.0	1.0	.0	.28	.17	.05	.00	.00
21.50	.209	28.1	.1	3.6	4.2	.0	1.0	.0	.28	.17	.05	.00	.00
21.30	.209	28.1	.1	3.6	4.2	.0	1.0	.0	.28	.17	.05	.00	.00
21.10	.209	28.1	.1	3.6	4.1	.0	1.0	.0	.28	.17	.05	.00	.00
20.90	.209	28.1	.1	3.7	4.0	.0	1.0	.0	.28	.17	.05	.00	.00
20.70	.209	28.1	.1	3.7	4.0	.0	1.0	.0	.28	.17	.05	.00	.00
20.50	.209	28.1	.1	3.7	3.9	.0	1.0	.0	.28	.17	.05	.00	.00
20.30	.209	28.1	.1	3.7	3.9	.0	1.0	.0	.28	.17	.05	.00	.00
20.10	.209	28.1	.1	3.7	3.8	.0	1.0	.0	.28	.17	.05	.00	.00
19.90	.209	28.1	.1	3.7	3.8	.0	1.0	.0	.28	.17	.05	.00	.00
19.70	.209	28.1	.1	3.8	3.8	.0	1.0	.0	.28	.17	.05	.00	.00
19.50	.209	28.1	.1	3.8	3.7	.0	1.0	.0	.28	.17	.05	.00	.00
19.30	.209	28.1	.1	3.8	3.7	.0	1.0	.0	.28	.17	.05	.00	.00
19.10	.209	28.1	.1	3.8	3.7	.0	1.0	.0	.28	.17	.05	.00	.00
18.90	.209	28.1	.1	3.8	3.6	.0	1.0	.0	.28	.17	.05	.00	.00
18.70	.209	28.1	.1	3.8	3.6	.0	1.0	.0	.28	.17	.05	.00	.00
18.50	.209	28.1	.1	3.9	3.6	.0	1.0	.0	.28	.17	.05	.00	.00
18.30	.209	28.1	.1	3.9	3.6	.0	1.0	.0	.28	.17	.05	.00	.00
18.10	.209	28.1	.1	3.9	3.5	.0	1.0	.0	.28	.17	.05	.00	.00
17.90	.209	28.1	.1	3.9	3.5	.0	1.0	.0	.28	.17	.05	.00	.00

2.00 .302 24.9 .6 3.8 4.4 .0 .3 .0 .20 .15 .05 .00 .00
 1.00 .302 24.0 .8 3.9 4.8 .0 .2 .0 .19 .14 .05 .00 .00
 .00 .302 23.2 .9 4.1 5.3 .0 .0 .0 .19 .14 .05 .00 .00

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 CAPSULF. SUMMARY
 ATWOOD GULLY

DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	BIBOD MG/L	ORGN MG/L	NH3 MG/L	CHLA UG/L	HEAER		CBOD		MH3		SOD
									RATE 1/DA	DECA 1/DA	SEIT 1/DA	DECA 1/DA	1/DA	1/DA	
HDMTR	.000	.0	.0	7.0	4.6	.0	.0	.0	3.12	.19	.22	.00	2.66		
3.50	.003	28.1	.1	3.0	15.5	.0	1.0	.0	3.12	.19	.22	.00	2.66		
3.40	.003	28.1	.1	3.2	11.9	.0	1.0	.0	3.47	.19	.12	.00	1.67		
3.30	.005	28.1	.1	4.7	10.4	.0	1.0	.0	3.47	.19	.12	.00	1.67		
3.20	.005	28.1	.1	4.7	9.8	.0	1.0	.0	3.47	.19	.12	.00	1.67		
3.10	.005	28.1	.1	4.8	9.3	.0	1.0	.0	3.47	.19	.12	.00	1.67		
3.00	.005	28.1	.1	4.8	8.8	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.80	.005	28.1	.1	4.9	7.9	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.70	.005	28.1	.1	4.9	7.5	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.60	.005	28.1	.1	5.0	7.1	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.50	.005	28.1	.1	5.0	6.8	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.40	.005	28.1	.1	5.0	6.5	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.30	.005	28.1	.1	5.1	6.2	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.20	.005	28.1	.1	5.1	5.9	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.10	.005	28.1	.1	5.1	5.7	.0	1.0	.0	3.47	.19	.12	.00	1.67		
2.00	.005	28.1	.1	5.1	5.4	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.90	.005	28.1	.1	5.2	5.2	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.80	.005	28.1	.1	5.2	5.0	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.70	.005	28.1	.1	5.2	4.8	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.60	.005	28.1	.1	5.2	4.7	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.50	.005	28.1	.1	5.2	4.5	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.40	.005	28.1	.1	5.3	4.3	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.30	.005	28.1	.1	5.3	4.2	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.20	.005	28.1	.1	5.3	4.1	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.10	.005	28.1	.1	5.3	4.0	.0	1.0	.0	3.47	.19	.12	.00	1.67		
1.00	.005	28.1	.1	5.3	3.8	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.90	.005	28.1	.1	5.3	3.7	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.80	.005	28.1	.1	5.3	3.6	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.70	.005	28.1	.1	5.3	3.6	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.60	.005	28.1	.1	5.4	3.5	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.50	.005	28.1	.1	5.4	3.4	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.40	.005	28.1	.1	5.4	3.3	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.30	.005	28.1	.1	5.4	3.3	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.20	.005	28.1	.1	5.3	3.3	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.10	.005	28.1	.1	5.0	3.6	.0	1.0	.0	3.47	.19	.12	.00	1.67		
.00	.005	28.1	.1	3.4	4.5	.0	1.0	.0	3.47	.19	.12	.00	1.67		

11.40	.009	28.1	.1	4.0	5.2	.0	1.0	.0	3.89	.19	.29	.00	2.66
11.30	.009	28.1	.1	4.0	5.0	.0	1.0	.0	3.89	.19	.29	.00	2.66
11.20	.009	28.1	.1	4.0	4.8	.0	1.0	.0	3.89	.19	.29	.00	2.66
11.10	.009	28.1	.1	4.0	4.7	.0	1.0	.0	3.89	.19	.29	.00	2.66
11.00	.009	28.1	.1	4.1	4.6	.0	1.0	.0	3.89	.19	.29	.00	2.66
10.00	.012	28.1	.1	5.0	4.7	.0	1.0	.0	3.61	.19	.17	.00	1.83
9.00	.012	28.1	.1	5.2	3.8	.0	1.0	.0	3.61	.19	.17	.00	1.83
8.00	.012	28.1	.1	5.3	3.1	.0	1.0	.0	3.61	.19	.17	.00	1.83
7.00	.012	28.1	.1	5.3	2.6	.0	1.0	.0	3.61	.19	.17	.00	1.83
6.00	.012	28.1	.1	5.4	2.1	.0	1.0	.0	3.61	.19	.17	.00	1.83
5.00	.012	28.1	.1	5.5	1.7	.0	1.0	.0	3.61	.19	.17	.00	1.83
4.00	.012	28.1	.1	5.5	1.4	.0	1.0	.0	3.61	.19	.17	.00	1.83
3.00	.012	28.1	.1	5.5	1.2	.0	1.0	.0	3.61	.19	.17	.00	1.83
2.00	.012	28.1	.1	5.5	1.0	.0	1.0	.0	3.61	.19	.17	.00	1.83
1.00	.012	28.1	.1	5.5	.9	.0	1.0	.0	3.61	.19	.17	.00	1.83
.00	.012	28.1	.1	3.7	4.0	.0	1.0	.0	3.61	.19	.17	.00	1.83

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CAPSULE SUMMARY
CROWLEY HIGH GULLY

DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD ORGN MG/L	NH3 MG/L	CHLA UG/L	REARER CBOD			SOD		
								CBOD	DECA	1/DA	CBOD	SETT	DECA
HDWTR	.000	.0	.0	7.0	4.6	.0	.0	.0	3.56	.19	.26	.00	2.83
1.80	.001	28.1	.1	3.4	17.0	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.70	.001	28.1	.1	3.1	13.8	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.60	.001	28.1	.1	3.1	11.3	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.50	.001	28.1	.1	3.2	9.3	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.40	.001	28.1	.1	3.3	7.8	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.30	.001	28.1	.1	3.4	6.5	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.20	.001	28.1	.1	3.5	5.5	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.10	.001	28.1	.1	3.6	4.7	.0	1.0	.0	3.56	.19	.26	.00	2.83
1.00	.001	28.1	.1	3.7	3.6	.0	1.0	.0	3.56	.19	.26	.00	2.83
.90	.001	28.1	.1	3.7	3.2	.0	1.0	.0	3.56	.19	.26	.00	2.83
.80	.001	28.1	.1	3.8	2.9	.0	1.0	.0	3.56	.19	.26	.00	2.83
.70	.001	28.1	.1	3.8	2.6	.0	1.0	.0	3.56	.19	.26	.00	2.83
.60	.001	28.1	.1	3.8	2.4	.0	1.0	.0	3.56	.19	.26	.00	2.83
.50	.001	28.1	.1	3.8	2.3	.0	1.0	.0	3.56	.19	.26	.00	2.83
.40	.001	28.1	.1	3.9	2.2	.0	1.0	.0	3.56	.19	.26	.00	2.83
.30	.001	28.1	.1	3.9	2.2	.0	1.0	.0	3.56	.19	.26	.00	2.83
.20	.001	28.1	.1	3.9	2.2	.0	1.0	.0	3.56	.19	.26	.00	2.83
.10	.001	28.1	.1	3.8	2.6	.0	1.0	.0	3.56	.19	.26	.00	2.83
.00	.001	28.1	.1	3.4	4.2	.0	1.0	.0	3.56	.19	.26	.00	2.83

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CAPSULE SUMMARY
BAYOU BLANC

DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD ORGN MG/L	NH3 MG/L	CHLA UG/L	REARER CBOD			SOD		
								CBOD	DECA	1/DA	CBOD	SETT	DECA
HDWTR	.003	.0	.0	7.0	13.7	.0	.0	.0	6.33	.07	.26	.00	3.00
25.60	.085	28.1	.1	5.0	22.6	.0	1.0	.0	6.33	.07	.26	.00	3.00
25.50	.085	28.1	.1	5.0	22.5	.0	1.0	.0	6.33	.07	.26	.00	3.00

25.40	.085 28.1	.1	5.0	22.4	.0	1.0	.0	6.33	.07	.26	.00	3.00
25.30	.085 28.1	.1	5.0	22.3	.0	1.0	.0	6.33	.07	.26	.00	3.00
25.20	.085 28.1	.1	5.0	22.2	.0	1.0	.0	6.33	.07	.26	.00	3.00
25.10	.085 28.1	.1	4.9	22.2	.0	1.0	.0	6.33	.07	.26	.00	3.00
25.00	.085 28.1	.1	4.9	22.1	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.90	.085 28.1	.1	4.9	22.0	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.80	.085 28.1	.1	4.9	21.9	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.70	.085 28.1	.1	4.9	21.9	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.60	.085 28.1	.1	4.9	21.8	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.50	.085 28.1	.1	4.9	21.7	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.40	.085 28.1	.1	4.9	21.6	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.30	.085 28.1	.1	4.9	21.6	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.20	.085 28.1	.1	4.9	21.5	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.10	.085 28.1	.1	4.8	21.4	.0	1.0	.0	6.33	.07	.26	.00	3.00
24.00	.085 28.1	.1	4.8	21.3	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.90	.085 28.1	.1	4.8	21.3	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.80	.085 28.1	.1	4.8	21.2	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.70	.085 28.1	.1	4.8	21.1	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.60	.085 28.1	.1	4.8	21.0	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.50	.085 28.1	.1	4.3	21.0	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.40	.085 28.1	.1	4.8	20.8	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.30	.085 28.1	.1	4.7	20.7	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.20	.085 28.1	.1	4.6	20.2	.0	1.0	.0	6.33	.07	.26	.00	3.00
23.10	.085 28.1	.1	4.2	19.3	.0	1.0	.0	2.70	.13	.16	.00	1.67
23.00	.085 28.1	.1	3.9	18.5	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.90	.085 28.1	.1	3.8	17.7	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.80	.085 28.1	.1	3.7	16.9	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.70	.085 28.1	.1	3.7	16.2	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.60	.085 28.1	.1	3.7	15.5	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.50	.085 28.1	.1	3.7	14.8	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.40	.085 28.1	.1	3.7	14.2	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.30	.085 28.1	.1	3.7	13.8	.0	1.0	.0	2.70	.13	.16	.00	1.67
22.20	.085 28.1	.1	3.7	13.7	.0	1.0	.0	1.98	.09	.00	.00	1.67
22.10	.085 28.1	.1	3.7	13.6	.0	1.0	.0	1.98	.09	.00	.00	1.67
21.40	.085 28.1	.1	3.7	13.5	.0	1.0	.0	1.98	.09	.00	.00	1.67
21.10	.085 28.1	.1	3.8	13.4	.0	1.0	.0	1.98	.09	.00	.00	1.67
20.80	.085 28.1	.1	3.8	13.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
20.50	.085 28.1	.1	3.8	13.1	.0	1.0	.0	1.98	.09	.00	.00	1.67
20.20	.085 28.1	.1	3.8	13.0	.0	1.0	.0	1.98	.09	.00	.00	1.67
19.90	.085 28.1	.1	3.9	12.9	.0	1.0	.0	1.98	.09	.00	.00	1.67
19.60	.085 28.1	.1	3.9	12.8	.0	1.0	.0	1.98	.09	.00	.00	1.67
19.30	.085 28.1	.1	3.9	12.7	.0	1.0	.0	1.98	.09	.00	.00	1.67
19.00	.085 28.1	.1	4.0	12.6	.0	1.0	.0	1.98	.09	.00	.00	1.67
18.70	.085 28.1	.1	4.0	12.5	.0	1.0	.0	1.98	.09	.00	.00	1.67
18.40	.085 28.1	.1	4.0	12.4	.0	1.0	.0	1.98	.09	.00	.00	1.67
18.10	.085 28.1	.1	4.1	12.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
17.80	.085 28.1	.1	4.1	12.2	.0	1.0	.0	1.98	.09	.00	.00	1.67
17.50	.085 28.1	.1	4.1	12.1	.0	1.0	.0	1.98	.09	.00	.00	1.67
17.20	.085 28.1	.1	4.2	12.0	.0	1.0	.0	1.98	.09	.00	.00	1.67
16.90	.085 28.1	.1	4.2	11.9	.0	1.0	.0	1.98	.09	.00	.00	1.67
16.60	.085 28.1	.1	4.2	11.8	.0	1.0	.0	1.98	.09	.00	.00	1.67
16.30	.085 28.1	.1	4.3	11.7	.0	1.0	.0	1.98	.09	.00	.00	1.67
16.00	.085 28.1	.1	4.3	11.6	.0	1.0	.0	1.98	.09	.00	.00	1.67
15.70	.085 28.1	.1	4.3	11.5	.0	1.0	.0	1.98	.09	.00	.00	1.67
15.40	.085 28.1	.1	4.4	11.4	.0	1.0	.0	1.98	.09	.00	.00	1.67

15.10	.085 28.1	.1	4.4	11.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
14.80	.085 28.1	.1	4.4	11.2	.0	1.0	.0	1.98	.09	.00	.00	1.67
14.50	.085 28.1	.1	4.5	11.1	.0	1.0	.0	1.98	.09	.00	.00	1.67
14.20	.085 28.1	.1	4.5	11.0	.0	1.0	.0	1.98	.09	.00	.00	1.67
13.90	.085 28.1	.1	4.5	10.9	.0	1.0	.0	1.98	.09	.00	.00	1.67
13.60	.085 28.1	.1	4.6	10.8	.0	1.0	.0	1.98	.09	.00	.00	1.67
13.30	.085 28.1	.1	4.6	10.7	.0	1.0	.0	1.98	.09	.00	.00	1.67
13.00	.085 28.1	.1	4.6	10.6	.0	1.0	.0	1.98	.09	.00	.00	1.67
12.70	.085 28.1	.1	4.6	10.5	.0	1.0	.0	1.98	.09	.00	.00	1.67
12.40	.085 28.1	.1	4.7	10.4	.0	1.0	.0	1.98	.09	.00	.00	1.67
12.10	.085 28.1	.1	4.7	10.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
11.80	.085 28.1	.1	4.7	10.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
11.50	.085 28.1	.1	4.7	10.2	.0	1.0	.0	1.98	.09	.00	.00	1.67
11.20	.085 28.1	.1	4.8	10.1	.0	1.0	.0	1.98	.09	.00	.00	1.67
10.90	.085 28.1	.1	4.8	10.0	.0	1.0	.0	1.98	.09	.00	.00	1.67
10.60	.085 28.1	.1	4.8	9.9	.0	1.0	.0	1.98	.09	.00	.00	1.67
10.30	.085 28.1	.1	4.8	9.8	.0	1.0	.0	1.98	.09	.00	.00	1.67
10.00	.085 28.1	.1	4.9	9.7	.0	1.0	.0	1.98	.09	.00	.00	1.67
9.70	.085 28.1	.1	4.9	9.7	.0	1.0	.0	1.98	.09	.00	.00	1.67
9.40	.085 28.1	.1	4.9	9.6	.0	1.0	.0	1.98	.09	.00	.00	1.67
9.10	.085 28.1	.1	4.9	9.5	.0	1.0	.0	1.98	.09	.00	.00	1.67
8.80	.085 28.1	.1	5.0	9.4	.0	1.0	.0	1.98	.09	.00	.00	1.67
8.50	.085 28.1	.1	5.0	9.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
8.20	.085 28.1	.1	5.0	9.3	.0	1.0	.0	1.98	.09	.00	.00	1.67
7.90	.085 28.1	.1	5.0	9.2	.0	1.0	.0	1.98	.09	.00	.00	1.67
7.60	.085 28.1	.1	5.0	9.1	.0	1.0	.0	1.98	.09	.00	.00	1.67
7.30	.085 28.1	.1	5.0	9.0	.0	1.0	.0	1.98	.09	.00	.00	1.67
7.00	.085 28.1	.1	5.0	8.8	.0	1.0	.0	1.98	.09	.00	.00	1.67
6.70	.085 28.1	.1	4.9	8.2	.0	1.0	.0	1.98	.09	.00	.00	1.67
6.40	.085 28.1	.1	4.0	6.1	.0	1.0	.0	.55	.13	.00	.00	1.67
6.00	.085 28.1	.1	3.7	5.4	.0	1.0	.0	.55	.13	.00	.00	1.67
5.60	.085 28.1	.1	3.5	5.0	.0	1.0	.0	.55	.13	.00	.00	1.67
5.20	.085 28.1	.1	3.4	4.7	.0	1.0	.0	.55	.13	.00	.00	1.67
4.80	.085 28.1	.1	3.4	4.4	.0	1.0	.0	.55	.13	.00	.00	1.67
4.40	.085 28.1	.1	3.3	4.1	.0	1.0	.0	.55	.13	.00	.00	1.67
4.00	.085 28.1	.1	3.3	3.9	.0	1.0	.0	.55	.13	.00	.00	1.67
3.60	.085 28.1	.1	3.3	3.7	.0	1.0	.0	.55	.13	.00	.00	1.67
3.20	.085 28.1	.1	3.3	3.5	.0	1.0	.0	.55	.13	.00	.00	1.67
2.80	.085 28.1	.1	3.2	3.3	.0	1.0	.0	.55	.13	.00	.00	1.67
2.40	.085 28.1	.1	3.2	3.2	.0	1.0	.0	.55	.13	.00	.00	1.67
2.00	.085 28.1	.1	3.2	3.1	.0	1.0	.0	.55	.13	.00	.00	1.67
1.60	.085 28.1	.1	3.1	3.0	.0	1.0	.0	.55	.13	.00	.00	1.67
1.20	.085 28.1	.1	3.1	3.0	.0	1.0	.0	.55	.13	.00	.00	1.67
.80	.085 28.1	.1	3.2	2.9	.0	1.0	.0	.55	.13	.00	.00	1.67
.40	.085 28.1	.1	3.3	2.9	.0	1.0	.0	.55	.13	.00	.00	1.67
.00	.085 28.1	.1	3.6	3.0	.0	1.0	.0	.55	.13	.00	.00	1.67

1 CAPSULE SUMMARY

N. COULEE TRIEF

DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	CHLA UG/L	HEAPER CBOD CROD		NH3 1/DA	SETP 1/DA	DECA 1/DA	SOD 1/DA
									DO MG/L	EBOD MG/L				
.003	.0	7.0	9.5	.0	.0	.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	4.0	14.3	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.6	13.6	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.4	13.0	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.2	12.3	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.1	11.7	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.0	11.1	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.0	10.4	.0	1.0	.0	.0	3.93	.19	.26	.00	2.83	
.005	28.1	.1	3.1	9.5	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.2	7.7	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	
.005	28.1	.1	3.7	3.0	.0	1.0	.0	.0	3.93	.19	.28	.00	2.83	

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 1 FREE FLOWING W/CHURCH POINT

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CH-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCH *
1	HDWTR	.0028	.00	.00	.0	.0	7.00	9.65	9.65	.00	.00	.00	.00	.0	0.	7.52
16	WSTLD	.0438	.00	.00	.0	.0	5.00	23.00	23.00	.00	.00	.00	.00	.0	0.	8.60

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEgin DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
1	70.20	70.00	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
2	70.00	69.80	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
3	69.80	69.60	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
4	69.60	69.40	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
5	69.40	69.20	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
6	69.20	69.00	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
7	69.00	68.80	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
8	68.80	68.60	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
9	68.60	68.40	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
10	68.40	68.20	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
11	68.20	68.00	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
12	68.00	67.80	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
13	67.80	67.60	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
14	67.60	67.40	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
15	67.40	67.20	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009
16	67.20	67.00	.0028	.0	.009	.27	.22	1.5	65.	299.1	.3	0.	.000	.452	.009

8	66.600	28.10	.1	.0	4.87	9.29	9.29	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.06
9	68.400	28.10	.1	.0	4.86	9.26	9.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.21
10	68.200	28.10	.1	.0	4.85	9.23	9.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.35
11	68.000	28.10	.1	.0	4.84	9.20	9.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.48
12	67.800	28.10	.1	.0	4.84	9.17	9.17	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.61
13	67.600	28.10	.1	.0	4.83	9.16	9.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.73
14	67.400	28.10	.1	.0	4.83	9.19	9.19	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.84
15	67.200	28.10	.1	.0	4.81	9.45	9.45	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.91
16	67.000	28.10	.1	.0	4.78	10.87	10.87	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.82
17	66.800	28.10	.1	.0	4.82	18.31	18.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.93
18	66.600	28.10	.1	.0	4.97	21.45	21.45	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.52
19	66.400	28.10	.1	.0	4.97	20.98	20.98	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.39
20	66.200	28.10	.1	.0	4.92	20.53	20.53	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.26

* CM-I - CHLORIDES MG/L
 ** G/CU M
 CM-II - SULFATES MG/L
 NCM = NBOD MG/L

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 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 2 POOLED REACH BFLOW CHURCH POINT
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUII

***** REACH INPUTS *****																
ELEM NO.	TYPE	FLOW CHS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	HH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
21	UPR RCH	.0466	28.10	.14	.0	.0	4.92	20.53	20.53	.00	1.00	1.00	1.00	.0	0.	8.26

***** HYDRAULIC PARAMETER VALUES *****															
ELEM NO.	FRGIN DIST KI	ENDING DIST KI	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
21	66.20	66.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	20.	.000	.000	.014
TOT AVG CUM					.014	.16	.44	7.4	649.	1475.8	3.2				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****																				
FLEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ARBOD DECAY 1/DA	FULL SOD 1/DA	CORR SOD *	ORGH DECAY 1/DA	NRH3 SETT 1/DA	NRH3 SRCE *	NRH3 DECAY 1/DA	DEFIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA	
21	66.000	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
20	DEG C RATE				.13			1.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.00	.10
AVG 20	DEG C RATE		1.65		.10				.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TRMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
21	66.000	28.10	.1	.0	.0	4.30	19.66	19.66	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.94

* CM-I - CHLORIDES MG/L
 ** G/CU M
 CM-II - SULFATES MG/L
 HCM = NBOD MG/L

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 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 3 POOLED REACH TO HAZELWOOD GULLY
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUI

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TRMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
22	UPR RCH	.0466	28.10	.14	.0	.0	4.30	19.66	19.66	.00	1.00	1.00	1.00	.0	0.	7.94
80	WSTLD	.0028	.00	.00	.0	.0	7.00	4.60	4.60	.00	.00	.00	.00	.0	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTY VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
22	66.00	65.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	40.	.000	1.900	.014
23	65.80	65.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	61.	.000	1.900	.014
24	65.60	65.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	81.	.001	1.900	.014
25	65.40	65.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	101.	.001	1.900	.014
26	65.20	65.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	121.	.001	1.900	.014
27	65.00	64.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	141.	.001	1.900	.014
28	64.80	64.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	162.	.001	1.900	.014
29	64.60	64.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	182.	.001	1.900	.014
30	64.40	64.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	202.	.001	1.900	.014
31	64.20	64.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	222.	.002	1.900	.014
32	64.00	63.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	242.	.002	1.900	.014
33	63.80	63.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	262.	.002	1.900	.014
34	63.60	63.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	283.	.002	1.900	.014
35	63.40	63.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	303.	.002	1.900	.014
36	63.20	63.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	323.	.002	1.900	.014
37	63.00	62.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	343.	.002	1.900	.014
38	62.80	62.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	363.	.002	1.900	.014
39	62.60	62.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	384.	.003	1.900	.014
40	62.40	62.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	404.	.003	1.900	.014
41	62.20	62.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	424.	.003	1.900	.014
42	62.00	61.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	444.	.003	1.900	.014
43	61.80	61.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	464.	.003	1.900	.014
44	61.60	61.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	485.	.003	1.900	.014
45	61.40	61.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	505.	.003	1.900	.014
46	61.20	61.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	525.	.004	1.900	.014

47	61.00	60.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	545.	.004	1.900	.014
48	60.80	60.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	565.	.004	1.900	.014
49	60.60	60.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	606.	.004	1.900	.014
50	60.40	60.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	626.	.004	1.900	.014
51	60.20	60.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	666.	.004	1.900	.014
52	60.00	59.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	666.	.005	1.900	.014
53	59.80	59.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	686.	.005	1.900	.014
54	59.60	59.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	707.	.005	1.900	.014
55	59.40	59.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	727.	.005	1.900	.014
56	59.20	59.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	747.	.005	1.900	.014
57	59.00	58.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	767.	.005	1.900	.014
58	58.80	58.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	787.	.005	1.900	.014
59	58.60	58.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	808.	.006	1.900	.014
60	58.40	58.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	828.	.006	1.900	.014
61	58.20	58.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	848.	.006	1.900	.014
62	58.00	57.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	868.	.006	1.900	.014
63	57.80	57.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	888.	.006	1.900	.014
64	57.60	57.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	909.	.006	1.900	.014
65	57.40	57.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	929.	.006	1.900	.014
66	57.20	57.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	949.	.006	1.900	.014
67	57.00	56.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	969.	.007	1.900	.014
68	56.80	56.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	989.	.007	1.900	.014
69	56.60	56.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1009.	.007	1.900	.014
70	56.40	56.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1030.	.007	1.900	.014
71	56.20	56.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1050.	.007	1.900	.014
72	56.00	55.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1070.	.007	1.900	.014
73	55.80	55.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1090.	.007	1.900	.014
74	55.60	55.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1110.	.008	1.900	.014
75	55.40	55.20	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1131.	.008	1.900	.014
76	55.20	55.00	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1151.	.008	1.900	.014
77	55.00	54.80	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1171.	.008	1.900	.014
78	54.80	54.60	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1191.	.008	1.900	.014
79	54.60	54.40	.0466	93.9	.014	.16	.44	7.4	649.	1475.8	3.2	1211.	.008	1.900	.014
80	54.40	54.20	.0495	94.3	.015	.15	.44	7.4	649.	1475.8	3.2	1211.	.008	1.900	.015

TOT 9.50 38312. 87072.0 3.2
 AVG .014 .44 7.4
 CUM 14.50

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAR RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD	CORR SOD	ORGN DECAY 1/DA	ORGN SETT 1/DA	NH3 DECAY 1/DA	NH3 SRCE	DEHIT RATE 1/DA	P04 SRCE	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SETT 1/DA
22	65.800	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
23	65.600	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
24	65.400	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
25	65.200	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
26	65.000	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
27	64.800	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
28	64.600	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
29	64.400	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04
30	64.200	7.81	1.92	.19	.10	.00	2.33	2.33	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.04

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCH *
22	65.800	28.10	.1	.0	.0	3.86	18.90	18.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.61
23	65.600	28.10	.1	.0	.0	3.60	18.14	18.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.36
24	65.400	28.10	.1	.0	.0	3.41	17.51	17.51	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.12
25	65.200	28.10	.1	.0	.0	3.28	16.91	16.91	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.89
26	65.000	28.10	.1	.0	.0	3.19	16.33	16.33	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.65
27	64.800	28.10	.1	.0	.0	3.14	15.78	15.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.43
28	64.600	28.10	.1	.0	.0	3.12	15.25	15.25	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.22
29	64.400	28.10	.1	.0	.0	3.11	14.74	14.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.01
30	64.200	28.10	.1	.0	.0	3.12	14.26	14.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.81
31	64.000	28.10	.1	.0	.0	3.14	13.80	13.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.62
32	63.800	28.10	.1	.0	.0	3.17	13.35	13.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.44
33	63.600	28.10	.1	.0	.0	3.20	12.93	12.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.26
34	63.400	28.10	.1	.0	.0	3.24	12.52	12.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.08
35	63.200	28.10	.1	.0	.0	3.28	12.14	12.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.91
36	63.000	28.10	.1	.0	.0	3.33	11.76	11.76	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.75
37	62.800	28.10	.1	.0	.0	3.37	11.41	11.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.59
38	62.600	28.10	.1	.0	.0	3.41	11.07	11.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.44
39	62.400	28.10	.1	.0	.0	3.46	10.74	10.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.30
40	62.200	28.10	.1	.0	.0	3.50	10.43	10.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.15
41	62.000	28.10	.1	.0	.0	3.55	10.14	10.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.02
42	61.800	28.10	.1	.0	.0	3.59	9.85	9.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.88
43	61.600	28.10	.1	.0	.0	3.63	9.58	9.58	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.75
44	61.400	28.10	.1	.0	.0	3.67	9.32	9.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.63
45	61.200	28.10	.1	.0	.0	3.71	9.07	9.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.51
46	61.000	28.10	.1	.0	.0	3.75	8.83	8.83	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.39
47	60.800	28.10	.1	.0	.0	3.79	8.60	8.60	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.28
48	60.600	28.10	.1	.0	.0	3.82	8.38	8.38	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.17
49	60.400	28.10	.1	.0	.0	3.85	8.17	8.17	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.07
50	60.200	28.10	.1	.0	.0	3.89	7.97	7.97	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.97
51	60.000	28.10	.1	.0	.0	3.92	7.78	7.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.87
52	59.800	28.10	.1	.0	.0	3.95	7.60	7.60	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.77
53	59.600	28.10	.1	.0	.0	3.98	7.43	7.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.68
54	59.400	28.10	.1	.0	.0	4.01	7.26	7.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.59
55	59.200	28.10	.1	.0	.0	4.03	7.10	7.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.51
56	59.000	28.10	.1	.0	.0	4.06	6.94	6.94	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.42
57	58.800	28.10	.1	.0	.0	4.09	6.80	6.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.34
58	58.600	28.10	.1	.0	.0	4.11	6.66	6.66	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.27
59	58.400	28.10	.1	.0	.0	4.13	6.52	6.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.19
60	58.200	28.10	.1	.0	.0	4.15	6.39	6.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.12
61	58.000	28.10	.1	.0	.0	4.18	6.27	6.27	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.05
62	57.800	28.10	.1	.0	.0	4.20	6.15	6.15	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.98
63	57.600	28.10	.1	.0	.0	4.22	6.04	6.04	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.92
64	57.400	28.10	.1	.0	.0	4.23	5.93	5.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.85
65	57.200	28.10	.1	.0	.0	4.25	5.83	5.83	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.79
66	57.000	28.10	.1	.0	.0	4.27	5.73	5.73	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.73
67	56.800	28.10	.1	.0	.0	4.29	5.64	5.64	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.67
68	56.600	28.10	.1	.0	.0	4.30	5.55	5.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.62
69	56.400	28.10	.1	.0	.0	4.32	5.46	5.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.57
70	56.200	28.10	.1	.0	.0	4.33	5.38	5.38	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.51
71	56.000	28.10	.1	.0	.0	4.35	5.30	5.30	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.46

72	55.800	28.10	.1	.0	4.36	5.22	5.22	.00	1.00	1.00	2.00	1.00	.0	.0	1.42
73	55.600	28.10	.1	.0	4.37	5.15	5.15	.00	1.00	1.00	2.00	1.00	.0	.0	1.37
74	55.400	28.10	.1	.0	4.39	5.08	5.08	.00	1.00	1.00	2.00	1.00	.0	.0	1.33
75	55.200	28.10	.1	.0	4.40	5.01	5.01	.00	1.00	1.00	2.00	1.00	.0	.0	1.29
76	55.000	28.10	.1	.0	4.41	4.94	4.94	.00	1.00	1.00	2.00	1.00	.0	.0	1.25
77	54.800	28.10	.1	.0	4.42	4.87	4.87	.00	1.00	1.00	2.00	1.00	.0	.0	1.24
78	54.600	28.10	.1	.0	4.44	4.77	4.77	.00	1.00	1.00	2.00	1.00	.0	.0	1.27
79	54.400	28.10	.1	.0	4.47	4.61	4.61	.00	1.00	1.00	2.00	1.00	.0	.0	1.42
80	54.200	28.10	.1	.0	4.54	4.27	4.27	.00	1.00	1.00	2.00	1.00	.0	.0	1.86

* CM-I - CHLORIDES MG/L
 ** G/CU M
 * CM-II - SULFATES MG/L
 HCM = NBOD MG/L

1
 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 4 HAZELWOOD GULLY TO COLES GULLY
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	HCM
81	UPR RCH	.0495	28.10	.14	.0	4.54	4.27	4.27	.00	1.00	1.00	1.00	1.00	1.00	.0	.0	1.86
94	WSTLD	.0028	.00	.00	.0	4.60	4.60	4.60	.00	.00	.00	.00	.00	.00	.0	.0	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISH CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
81	54.20	53.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	1567.	.003	4.000	.005
82	53.20	52.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	1923.	.004	4.000	.005
83	52.20	51.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	2278.	.005	4.000	.006
84	51.20	50.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	2634.	.006	4.000	.007
85	50.20	49.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	2990.	.006	4.000	.007
86	49.20	48.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	3345.	.007	4.000	.008
87	48.20	47.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	3701.	.008	4.000	.009
88	47.20	46.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	4057.	.009	4.000	.009
89	46.20	45.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	4412.	.010	4.000	.010
90	45.20	44.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	4768.	.010	4.000	.011
91	44.20	43.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	5124.	.011	4.000	.011
92	43.20	42.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	5479.	.012	4.000	.012
93	42.20	41.20	.0495	94.3	.005	2.41	.86	12.0	10320.	11999.9	10.3	5835.	.013	4.000	.013
94	41.20	40.20	.0523	94.6	.005	2.28	.86	12.0	10320.	11999.9	10.3	6191.	.013	4.000	.014

TOT 144479. 167998.7 10.3
 AVG .86 12.0
 CUM .005 48.18

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

FLEM NO.	ENDING DIST	SAT D.O. MG/L	REAFR RATE 1/DA	CBOD SEIT 1/DA	ANBOD DECAT 1/DA	FULL SOD	CORR SOD	ORGN DECAT 1/DA	ORGN SF:TT 1/DA	NH3 DECAT 1/DA	NH3 SRCE	DENIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SEIT 1/DA
81	53.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
82	52.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
83	51.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
84	50.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
85	49.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
86	48.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
87	47.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
88	46.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
89	45.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
90	44.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
91	43.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
92	42.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
93	41.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
94	40.200	7.81	.93	.19	.10	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.09
20 DEG C RATE			.13	.10	.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.39	.10
AVG 20 DEG C RATE			.80	.10	.00													

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
81	53.200	28.10	.1	.0	.0	4.54	3.84	3.84	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.25
82	52.200	28.10	.1	.0	.0	4.54	3.50	3.50	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.57
83	51.200	28.10	.1	.0	.0	4.54	3.28	3.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.78
84	50.200	28.10	.1	.0	.0	4.55	3.14	3.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.92
85	49.200	28.10	.1	.0	.0	4.55	3.05	3.05	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.01
86	48.200	28.10	.1	.0	.0	4.55	2.99	2.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.08
87	47.200	28.10	.1	.0	.0	4.55	2.95	2.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.12
88	46.200	28.10	.1	.0	.0	4.55	2.93	2.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.15
89	45.200	28.10	.1	.0	.0	4.55	2.91	2.91	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.17
90	44.200	28.10	.1	.0	.0	4.55	2.90	2.90	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.18
91	43.200	28.10	.1	.0	.0	4.55	2.90	2.90	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.18
92	42.200	28.10	.1	.0	.0	4.53	2.92	2.92	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.18
93	41.200	28.10	.1	.0	.0	4.48	3.00	3.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.14
94	40.200	28.10	.1	.0	.0	4.20	3.29	3.29	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.00

* CM-I = CHLORIDES MG/L

CM-II = SULFATES MG/L

NCM = NPROD MG/L

** G/CU M

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FINAL REPORT B. PLAQUEMINE BRULE
REACH NO. 5 COLES GULLY TO LONGPOINT GULLY

BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUII

***** RILACH INPUTS *****

ELEM NO.	TYPE	FLOW CFS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	IIBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCHM *
95	UPR RCH	.0523	28.10	.14	.0	.0	4.20	3.29	3.29	.00	1.00	1.00	1.00	.0	0.	3.00
102	WSTLD	.0028	.00	.00	.0	.0	7.00	4.60	4.60	.00	.00	.00	.00	.0	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDINS DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
95	49.20	39.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	7312.	.003	5.300	.003
96	39.20	38.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	8433.	.003	5.300	.003
97	38.20	37.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	9355.	.004	5.300	.004
98	37.20	36.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	10676.	.004	5.300	.004
99	36.20	35.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	11797.	.004	5.300	.004
100	35.20	34.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	12918.	.005	5.300	.005
101	34.20	33.20	.0523	94.6	.001	13.25	2.07	28.9	59880.	28927.7	59.9	14039.	.005	5.300	.005
102	33.20	32.20	.0551	94.9	.001	12.57	2.07	28.9	59880.	28927.7	59.9	15161.	.006	5.300	.006

TOT					105.35		2.07	28.9	479042.	231421.2	59.9					
AVG					.001											
CUM						153.53										

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDINS DIST	SAT D.O. MG/L	REAR RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOD *	CORR SOD *	ORGN DECAT 1/DA	ORGN SETT 1/DA	NH3 DECAT 1/DA	NH3 SRCE *	DFHIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAR PROD **	COLI DECAT 1/DA	NCHM DECAT 1/DA	NCHM SETT 1/DA	
95	39.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
96	38.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
97	37.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
98	36.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
99	35.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
100	34.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
101	33.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21
102	32.200	7.81	.37	.19	.10	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.17	.21

20	DFG C RATE							.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.57
AVG 20	DEG C RATE		.32		.10				.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDINGS DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
95	39.200	28.10	.1	.0	3.83	3.49	3.49	3.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.84
96	38.200	28.10	.1	.0	3.72	3.55	3.55	3.55	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.79
97	37.200	28.10	.1	.0	3.66	3.59	3.59	3.59	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.77
98	36.200	28.10	.1	.0	3.62	3.61	3.61	3.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.77
99	35.200	28.10	.1	.0	3.58	3.64	3.64	3.64	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.79
100	34.200	28.10	.1	.0	3.52	3.68	3.68	3.68	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.84
101	33.200	28.10	.1	.0	3.43	3.77	3.77	3.77	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.97
102	32.200	28.10	.1	.0	3.31	3.98	3.98	3.98	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.31

* CM-I = CHLORIDES MG/L
 ** G/CU M
 * CM-II = SULFATES MG/L
 HCM = NBOD MG/L

FINAL REPORT B. PLAQUEMINE BRULF.
 REACH NO. 6 LONGPOINT GULLY TO ATWOOD BAYOU
 BAYOU PLAQUEMINE BRULF. WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
103	UPK RCH	.0551	28.10	.14	.0	.0	3.31	3.98	3.98	.00	1.00	1.00	1.00	.0	.0	0.	3.31

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST ICI	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VVELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
103	32.20	31.80	.0551	94.9	.001	5.38	2.14	30.0	25641.	11981.8	64.1	15643.	.005	5.400	.005
104	31.80	31.40	.0551	94.9	.001	5.38	2.14	30.0	25641.	11981.8	64.1	16126.	.006	5.400	.006
TOT AVG CUM					.001	10.77	2.14	30.0	51282.	23963.6	64.1				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECY 1/DA	CBOD SETT 1/DA	ANBOD DECY 1/DA	FULL SOD *	CORR SOD *	ORGN DECY 1/DA	ORGN SETT 1/DA	ORGN DECY 1/DA	NH3 SRCE	NH3 DECY 1/DA	DENIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA
205	29.500	7.81	.31	.17	.08	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.13
206	28.700	7.81	.31	.17	.08	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.13
207	27.900	7.81	.31	.17	.08	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.13
208	27.100	7.81	.31	.17	.08	.00	.83	.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.13
209	DIG C RATE		.12	.06	.08		.50	.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.73	.05
210	AVG 20 DEG C RATE		.27	.08	.08				.00	.00	.00									

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALH PPT	CM-1 *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
205	29.500	28.10	.1	.0	.0	3.27	4.34	4.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.07
206	28.700	28.10	.1	.0	.0	3.18	4.32	4.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.39
207	27.900	28.10	.1	.0	.0	3.15	4.30	4.30	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.77
208	27.100	28.10	.1	.0	.0	3.21	4.28	4.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.34

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

ETNAL REPORT B. PLAQUEMINE BRULE REACH NO. 15 CROWLEY HIGH GULCH TO ROLLER C. SUMNER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALH PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO312 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
228	UPR RCH	.0722	28.10	.10	.0	.0	3.21	4.28	4.28	.00	1.00	1.00	1.00	.0	.0	0.	6.34
228	TRIR	.0013	28.10	.10	.0	.0	3.36	4.25	4.25	.00	1.00	1.00	1.00	.0	.0	0.	6.86
247	WSTLD	.1353	.00	.00	.0	.0	6.00	11.50	11.50	.00	.00	.00	.00	.0	.0	0.	8.60

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VFLO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACI AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VFLO M/S	DISPRN SQ M/S	MEAN VELO M/S
228	27.10	26.90	.0736	92.3	.001	3.06	2.83	34.3	19417.	6861.3	97.1	22683.	.005	6.900	.005
229	26.90	26.70	.0736	92.3	.001	3.06	2.83	34.3	19417.	6861.3	97.1	23032.	.005	6.900	.005
230	26.70	26.50	.0736	92.3	.001	3.06	2.83	34.3	19417.	6861.3	97.1	23381.	.005	6.900	.005
231	26.50	26.30	.0736	92.3	.001	3.06	2.83	34.3	19417.	6861.3	97.1	23731.	.005	6.900	.005

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELFM NO.	ENDING DIST	SAT D.O. MG/L	RAER RATE 1/DA	CBOD DECAT 1/DA	CBOD SFTT 1/DA	AIROD DECAT 1/DA	FULL SOD *	CORR SOD *	ORGN DECAT 1/DA	ORGN SFTT 1/DA	NH3 DECAT 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA	
255	21.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
256	21.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
257	21.100	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
259	20.900	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
259	20.700	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
260	20.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
261	20.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
262	20.100	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
263	19.900	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
264	19.700	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
265	19.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
266	19.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
267	19.100	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
268	18.900	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
269	18.700	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
270	18.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
271	18.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
272	18.100	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
273	17.900	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
274	17.700	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
275	17.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
276	17.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
277	17.100	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
278	16.900	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
279	16.700	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
280	16.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
281	16.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
282	16.100	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
283	15.900	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
284	15.700	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
285	15.500	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
286	15.300	7.81	.28	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	
20 DEG C RATE			.24	.12	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.82	.00
AVG 20 DEG C RATE																				

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	FBOB MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
255	21.500	28.10	.1	.0	.0	3.62	4.23	4.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.99
256	21.300	28.10	.1	.0	.0	3.63	4.16	4.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.98
257	21.100	28.10	.1	.0	.0	3.65	4.09	4.09	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.98
258	20.900	28.10	.1	.0	.0	3.66	4.03	4.03	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.98
259	20.700	28.10	.1	.0	.0	3.67	3.98	3.98	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.97

ELEM NO.	TYPE	BEGIN DJST KM	ENDING DJST KM	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
260		20.500	28.10	.1		.0	3.69	3.93	3.93	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.96
261		20.300	28.10	.1		.0	3.71	3.88	3.88	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.95
262		20.100	28.10	.1		.0	3.72	3.84	3.84	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.94
263		19.900	28.10	.1		.0	3.74	3.80	3.80	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.93
264		19.700	28.10	.1		.0	3.76	3.76	3.76	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.92
265		19.500	28.10	.1		.0	3.77	3.72	3.72	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.90
266		19.300	28.10	.1		.0	3.79	3.69	3.69	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.89
267		19.100	28.10	.1		.0	3.81	3.66	3.66	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.87
268		18.900	28.10	.1		.0	3.82	3.63	3.63	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.85
269		18.700	28.10	.1		.0	3.84	3.61	3.61	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.82
270		18.500	28.10	.1		.0	3.85	3.58	3.58	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.80
271		18.300	28.10	.1		.0	3.87	3.56	3.56	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.77
272		18.100	28.10	.1		.0	3.88	3.53	3.53	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.74
273		17.900	28.10	.1		.0	3.89	3.51	3.51	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.70
274		17.700	28.10	.1		.0	3.90	3.49	3.49	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.66
275		17.500	28.10	.1		.0	3.91	3.46	3.46	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.62
276		17.300	28.10	.1		.0	3.92	3.44	3.44	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.58
277		17.100	28.10	.1		.0	3.92	3.42	3.42	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.53
278		16.900	28.10	.1		.0	3.92	3.39	3.39	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.47
279		16.700	28.10	.1		.0	3.92	3.36	3.36	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.41
280		16.500	28.10	.1		.0	3.92	3.33	3.33	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.34
281		16.300	28.10	.1		.0	3.91	3.30	3.30	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.27
282		16.100	28.10	.1		.0	3.89	3.26	3.26	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.20
283		15.900	28.10	.1		.0	3.87	3.22	3.22	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.11
284		15.700	28.10	.1		.0	3.84	3.18	3.18	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	8.02
285		15.500	28.10	.1		.0	3.80	3.13	3.13	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	7.92
286		15.300	28.10	.1		.0	3.75	3.07	3.07	.00	1.00	1.00	2.00	1.00	1.00	.0	.0	7.81

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

FINAL REPORT B. PLAQUEMINE BRULE BAYOU BLANC TO N. COULFE TRIEF
 REACH NO. 22 BAYOU BLANC TO N. COULFE TRIEF
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUI

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
390	UPR RCH	.2088	28.10	.10	.0	.0	3.75	3.07	3.07	.00	1.00	1.00	1.00	.0	.0	7.91
390	TRIB	.0850	28.10	.10	.0	.0	3.57	3.01	3.01	.00	1.00	1.00	1.00	.0	.0	7.34

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DJST KM	ENDING DJST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
390	15.30	15.20	.2938	97.1	.002	.70	3.57	50.0	17857.	5002.0	178.6	54748.	.007	8.000	.007
391	15.20	15.10	.2938	97.1	.002	.70	3.57	50.0	17857.	5002.0	178.6	55045.	.007	8.000	.007
392	15.10	15.00	.2938	97.1	.002	.70	3.57	50.0	17857.	5002.0	178.6	55341.	.007	8.000	.007
393	15.00	14.90	.2938	97.1	.002	.70	3.57	50.0	17857.	5002.0	178.6	55638.	.007	8.000	.007

394 14.90 14.80 .2938 97.1 .002 .70 3.57 50.0 17857. 5002.0 178.6 55934. .007 8.000 .007
 TOT
 AVG 3.52 89286. 25010.0
 CUM 330.40 50.0 178.6

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOL	CORR SOL	ORGH DECAT 1/DA	ORGH SETT 1/DA	ORGH DECAT 1/DA	NH3 DECAT 1/DA	NH3 SRCE	DEINIT RATE 1/DA	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAT 1/DA	NCM DECAT 1/DA			
390	15.200	7.81	.22	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00		
391	15.100	7.81	.22	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00		
392	15.000	7.81	.22	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00		
393	14.900	7.81	.22	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00		
394	14.800	7.81	.22	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00		
20	DEG C RATE		.12			.00		.00		.00		.00		.00	.00			.00		7.61	.00	
AVG 20	DEG C RATE		.19		.05			.00		.00		.00		.00	.00			.00				.00

* G/SQ M/D

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	HCM
390	15.200	28.10	.1	.0	.0	3.71	3.03	3.03	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.73
391	15.100	28.10	.1	.0	.0	3.72	3.02	3.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.76
392	15.000	28.10	.1	.0	.0	3.72	3.00	3.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.77
393	14.900	28.10	.1	.0	.0	3.73	2.99	2.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.78
394	14.800	28.10	.1	.0	.0	3.73	2.98	2.98	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.79

* CM-I = CHLORIDES MG/L
 ** G/CU M

1
 FINAL REPORT B. PLAQUEMINE BRUIE
 REACH NO. 24 BELOW N. COULEL TRIEF

BAYOU PLAQUEMINE BRUIE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
405	UPR RCH	.2938	28.10	.10	.0	.0	3.73	2.98	3.01	.00	1.00	1.00	1.00	.0	0.	7.79
405	TRIB	.0050	28.10	.10	.0	.0	3.74	3.01	3.01	.00	1.00	1.00	1.00	.0	0.	7.84

***** HYDRAULIC PARAMETER VALUES *****															
ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CNS	PCT EFF	ADVTIV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
405	14.80	14.70	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	56232.	.008	8.400	.008
406	14.70	14.60	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	56530.	.008	8.400	.008
407	14.60	14.50	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	56828.	.008	8.400	.008
408	14.50	14.40	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	57126.	.008	8.400	.008
409	14.40	14.30	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	57423.	.008	8.400	.008
410	14.30	14.20	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	57721.	.008	8.400	.008
411	14.20	14.10	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	58019.	.008	8.400	.008
412	14.10	14.00	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	58317.	.008	8.400	.008
413	14.00	13.90	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	58615.	.008	8.400	.008
414	13.90	13.80	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	58913.	.008	8.400	.008
415	13.80	13.70	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	59211.	.008	8.400	.008
416	13.70	13.60	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	59508.	.008	8.400	.008
417	13.60	13.50	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	59806.	.008	8.400	.008
418	13.50	13.40	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	60104.	.008	8.400	.008
419	13.40	13.30	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	60402.	.008	8.400	.008
420	13.30	13.20	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	60700.	.008	8.400	.008
421	13.20	13.10	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	60998.	.008	8.400	.008
422	13.10	13.00	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	61296.	.008	8.400	.008
423	13.00	12.90	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	61593.	.008	8.400	.008
424	12.90	12.80	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	61891.	.008	8.400	.008
425	12.80	12.70	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	62189.	.008	8.400	.009
426	12.70	12.60	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	62487.	.008	8.400	.009
427	12.60	12.50	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	62785.	.009	8.400	.009
428	12.50	12.40	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	63083.	.009	8.400	.009
429	12.40	12.30	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	63381.	.009	8.400	.009
430	12.30	12.20	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	63678.	.009	8.400	.009
431	12.20	12.10	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	63976.	.009	8.400	.009
432	12.10	12.00	.2988	96.2	.002	.63	3.43	47.8	16393.	4779.4	163.9	64274.	.009	8.400	.009
TOT						17.78			459016.	133824.0					
AVG					.002		3.43	47.8			163.9				
CUM						348.17									

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****																				
ELEM NO.	ENDING DIST	SAT' D.O.	REAER RATE	CBOD DECAY	CBOD SETT	AH/BD DECAY	FULL SOD	CORR SOD	ORGN DECAY	ORGN SETT	NH3 DFCAY	NH3 SRCE	DEHIF RATE	PO4 SRCE	AI/6 PROD	MAC PROD	COLJ DECAY	NCM DECAY	NCM SETT	
405	14.700	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
406	14.600	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
407	14.500	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
408	14.400	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
409	14.300	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
410	14.200	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
411	14.100	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
412	14.000	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00
413	13.900	7.81	.23	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00

429 12.300 28.10 .1 .0 3.73 2.73 2.73 .00 1.00 1.00 2.00 1.00 .0 0. 6.80
 430 12.200 28.10 .1 .0 3.71 2.72 2.72 .00 1.00 1.00 2.00 1.00 .0 0. 6.71
 431 12.100 28.10 .1 .0 3.70 2.71 2.71 .00 1.00 1.00 2.00 1.00 .0 0. 6.61
 432 12.000 28.10 .1 .0 3.68 2.71 2.71 .00 1.00 1.00 2.00 1.00 .0 0. 6.51

* CM-I = CHLORIDES CM-II = SULFATES HCM = NBOD
 MG/L MG/L MG/L
 ** G/CU M

1
 FINAL REPORT B. PLAQUEMINE BRUIE WATERSHED
 REACH NO. 25 ABOVE BAYOU JONAS
 SUMMER PROJECTION RUN

***** REACH INPUTS *****
 ELEM TYPE FLOW TEMP SALIN CN-I CM-II DO BOD EBOD ORGH NH3 NO3+2 PHOS CHL A COLI HCM
 HO. CHS DEG C PPT * * MG/L MG/L MG/L MG/L MG/L MG/L UG/L #/100ML *
 433 UPR RCH .2988 28.10 .10 .0 .0 3.68 2.71 2.71 .00 1.00 1.00 2.00 1.00 .0 0. 6.51
 438 WSTLD .0028 .00 .00 .0 .0 7.00 4.60 4.60 .00 .00 .00 .00 .00 .0 0. 6.80

***** HYDRAULIC PARAMETER VALUES *****
 ELEM BEGIN ENDING FLOW PCT ADVCTY TRAVEL DEPTH WIDTH VOLUME SUREFACS X-SECT TIDAL TIDAL MEAN
 HO. DIST DIST KM CHS EFF EFF M/S VELO TIME DAYS M M M CU M SQ M AREA AREA CU M M/S M/S VELO
 433 12.00 11.00 .2988 96.2 .001 11.07 4.50 63.5 285714. 63492.1 285.7 68665. .005 9.300 .005
 434 11.00 10.00 .2988 96.2 .001 11.07 4.50 63.5 285714. 63492.1 285.7 73056. .006 9.300 .006
 435 10.00 9.00 .2988 96.2 .001 11.07 4.50 63.5 285714. 63492.1 285.7 77447. .006 9.300 .006
 436 9.00 8.00 .2988 96.2 .001 11.07 4.50 63.5 285714. 63492.1 285.7 81839. .006 9.300 .006
 437 8.00 7.00 .2988 96.2 .001 11.07 4.50 63.5 285714. 63492.1 285.7 86230. .007 9.300 .007
 438 7.00 6.00 .3017 96.2 .001 10.96 4.50 63.5 285714. 63492.1 285.7 90621. .007 9.300 .007

TOT 1714286. 360952.4
 AVG 4.50 63.5 285.7
 CUM 414.47

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. DIST	REAER RATE	CBOD DECAT	CBOD SETT	ANBOD DECAT	FULL SOD	COKR SOD	ORGN DECAT	ORGN SETT	NIH3 DECAT	NIH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAT	COLI DECAT	NCM SF/TT	NCM 1/DA	NCM 1/DA	
433	11.000	7.81	.17	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	
434	10.000	7.81	.17	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	
435	9.000	7.81	.17	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	
436	8.000	7.81	.17	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	
437	7.000	7.81	.17	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	
438	6.000	7.81	.17	.17	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	
20 DEG C RATE			.12		.00		.00		.00		.00		.00		.00		.00		6.88		.00	
AVG 20 DEG C RATE			.15		.05				.00													.00

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO	BOD	EBOD	ORGN	NIH3	NIH3	RO3+2	TOTN	PHOS	CHL A	MACRO	COLI	NCM
433	11.000	28.10	.1	.0	.0	3.61	2.69	2.69	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.18
434	10.000	28.10	.1	.0	.0	3.57	2.69	2.69	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.76
435	9.000	28.10	.1	.0	.0	3.55	2.71	2.71	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.45
436	8.000	28.10	.1	.0	.0	3.54	2.76	2.76	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.24
437	7.000	28.10	.1	.0	.0	3.54	2.86	2.86	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.12
438	6.000	28.10	.1	.0	.0	3.55	3.04	3.04	.00	1.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.11

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * CH-I = CHLORIDES MG/L
 * CH-II = SULFATES MG/L

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 26 BAYOU JONAS TO BAYOU DES CANNES
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	CM-II	DO	ROD	FIOD	ORGN	NIH3	NIH3	RO3+2	PHOS	CHL A	MACRO	COLI	NCM
439	UPR RCH	.3017	28.10	.10	.0	.0	3.56	3.04	3.04	.00	1.00	1.00	1.00	1.00	.0	.0	0.	5.11

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST	ENDING DIST	FLOW CMS	PCT EFF	ADVCTV VELO	TRAVEL TIME	DEPTH	WIDTH	VOLUME	SURFACE AREA	X-SECT AREA	TIDAL PRISM	TIDAL VELO	DISPRN	MEAN VELO
439	6.00	5.00	.3017	96.2	.002	7.38	3.71	51.8	192308.	51835.0	192.3	94560.	.011	10.200	.011
440	5.00	4.00	.3017	96.2	.002	7.38	3.71	51.8	192308.	51835.0	192.3	98500.	.011	10.200	.011

VELOCITY = .0008 TO .0225 M/S
 DEPTH = .22 TO 4.50 M
 WIDTH = 1.5 TO 63.5 M
 BOD DECAY = .14 TO .19 PER DAY
 NH3 DECAY = .00 TO .00 PER DAY
 SDMNT OXYGEN DEMND = 2.33 G/SQ M/D
 NH3 SOURCE = .00 TO .00 G/SQ M/D
 REAERATION = .17 TO 3.71 PER DAY
 BOD SETTLING = .05 TO .10 PER DAY
 ORGH DECAY = .00 TO .00 PER DAY
 ORGH SETTLING = .00 TO .00 PER DAY
 TEMPERATURE = 23.23 TO 28.16 DEG C
 DISSOLVED OXYGEN = 3.11 TO 5.89 MG/L

1 FINAL REPORT ATWOOD GULLY
 REACH NO. 7 ATWOOD GULLY

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CHS	TEMP DEG C	SALN PPT	CH-I	CM-II	DO MG/L	BOD MG/L	FBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
105	HDWTR	.0000	.00	.00	.0	.0	7.00	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
105	WSTLD	.0025	.00	.00	.0	.0	5.00	23.00	23.00	.00	.00	.00	.00	.0	0.	21.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CHS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
105	3.60	3.50	.0025	100.0	.001	.88	.25	7.8	191.	776.4	1.9	0.	.000	.076	.001
106	3.50	3.40	.0025	100.0	.001	.88	.25	7.8	191.	776.4	1.9	0.	.000	.076	.001
TOT AVG					.001	1.75	.25	7.8	383.	1552.7	1.9				
CUM						1.75					1.9				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD SETT 1/DA	AMBOD DECCAY 1/DA	FULL SOD	CORR SOD	ORGN DECCAY 1/DA	ORGN SETT 1/DA	NH3 SRCE	NH3 DECCAY 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECCAY 1/DA	NCM DECCAY 1/DA	NCM SETT 1/DA
105	3.500	7.81	3.12	.19	.22	.00	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.22	.05
106	3.400	7.81	3.12	.19	.22	.00	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.22	.05
20 DEG C RATE			.13	.00	.00		1.60	.00	.00	.00	.00	.00	.00	.00	.00	8.90	.22
AVG 20 DEG C RATE			2.68	.22	.00			.00									

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALH PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
105	3.500	28.10	.1	.0	.0	3.04	15.48	15.48	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.44
106	3.400	28.10	.1	.0	.0	3.18	11.93	11.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.45

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * CHL = CHLORIDES MG/L
 * HCH = HBOD MG/L

1
 FINAL REPORT ATWOOD GULLY
 REACH NO. 8 ATWOOD BAYOU TO BBP
 BAYOU PLAQUEMINE BRULF. WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
107	UPR RCH	.0025	28.10	.14	.0	.0	3.18	11.93	11.93	.00	1.00	1.00	1.00	.0	0.	11.45
107	WSTLD	.0028	.00	.00	.0	.0	7.00	9.50	9.50	.00	.00	.00	.00	.0	0.	1.70

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
107	3.40	3.30	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
108	3.30	3.20	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
109	3.20	3.10	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
110	3.10	3.00	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
111	3.00	2.90	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
112	2.90	2.80	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
113	2.80	2.70	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
114	2.70	2.60	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004
115	2.60	2.50	.0054	100.0	.004	.26	.23	5.1	120.	512.0	1.2	0.	.000	.247	.004

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CH-I	CH-II	DO MG/L	BOD MG/L	FRSD MG/L	ORGH MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	ICM
125	1.500	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
126	1.400	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
127	1.300	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
128	1.200	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
129	1.100	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
130	1.000	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
131	.900	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
132	.800	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
133	.700	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
134	.600	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
135	.500	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
136	.400	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
137	.300	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
138	.200	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
139	.100	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
140	.000	7.81	3.47	.19	.12	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.22	.03
20 DEG C RATE .13 .12 .00 1.00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 9.06 .12																	
AVG 20 DEG C RATE 2.98 .12 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00																	

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CH-I	CH-II	DO MG/L	BOD MG/L	FRSD MG/L	ORGH MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	ICM
107	3.300	28.10	.1	.0	.0	4.66	10.35	10.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.42
108	3.200	28.10	.1	.0	.0	4.71	9.79	9.79	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.10
109	3.100	28.10	.1	.0	.0	4.75	9.26	9.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.79
110	3.000	28.10	.1	.0	.0	4.80	8.77	8.77	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.50
111	2.900	28.10	.1	.0	.0	4.85	8.32	8.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.23
112	2.800	28.10	.1	.0	.0	4.89	7.89	7.89	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.97
113	2.700	28.10	.1	.0	.0	4.93	7.50	7.50	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.73
114	2.600	28.10	.1	.0	.0	4.96	7.14	7.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.51
115	2.500	28.10	.1	.0	.0	5.00	6.80	6.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.30
116	2.400	28.10	.1	.0	.0	5.03	6.49	6.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.10
117	2.300	28.10	.1	.0	.0	5.06	6.19	6.19	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.91
118	2.200	28.10	.1	.0	.0	5.09	5.92	5.92	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.73
119	2.100	28.10	.1	.0	.0	5.12	5.67	5.67	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.57
120	2.000	28.10	.1	.0	.0	5.14	5.44	5.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.41
121	1.900	28.10	.1	.0	.0	5.17	5.22	5.22	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.26
122	1.800	28.10	.1	.0	.0	5.19	5.02	5.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.13
123	1.700	28.10	.1	.0	.0	5.21	4.83	4.83	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.00
124	1.600	28.10	.1	.0	.0	5.23	4.66	4.66	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.87
125	1.500	28.10	.1	.0	.0	5.24	4.50	4.50	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.76
126	1.400	28.10	.1	.0	.0	5.26	4.35	4.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.65
127	1.300	28.10	.1	.0	.0	5.28	4.21	4.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.55
128	1.200	28.10	.1	.0	.0	5.29	4.08	4.08	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.45
129	1.100	28.10	.1	.0	.0	5.30	3.96	3.96	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.36
130	1.000	28.10	.1	.0	.0	5.32	3.85	3.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.28
131	.900	28.10	.1	.0	.0	5.33	3.74	3.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.20
132	.800	28.10	.1	.0	.0	5.34	3.65	3.65	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.13
133	.700	28.10	.1	.0	.0	5.35	3.56	3.56	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.06

134	.600	28.10	.1	.0	5.36	3.48	3.48	3.48	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	2.99
135	.500	28.10	.1	.0	5.37	3.40	3.40	3.40	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	2.93
136	.400	28.10	.1	.0	5.37	3.34	3.34	3.34	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	2.89
137	.300	28.10	.1	.0	5.36	3.31	3.31	3.31	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	2.88
138	.200	28.10	.1	.0	5.29	3.35	3.35	3.35	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	2.96
139	.100	28.10	.1	.0	4.96	3.59	3.59	3.59	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	3.31
140	.000	28.10	.1	.0	3.39	4.46	4.46	4.46	.00	1.00	1.00	2.00	2.00	1.00	.0	0.	4.45

* CM-I - CHLORIDES
 ** G/CU M
 CM-II = SULFATES
 NCH = NBOD
 MG/L

1 STRAHM SUMMARY
 ATWOOD GULLY
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

TRAVEL TIME = 10.5 DAYS
 MAXIMUM EFFLUENT = 100.0 PERCENT

FLOW	-	.0025 TO .0054	CMS
DISPERSION	-	.0763 TO .2473	SQ M/S
VELOCITY	=	.0013 TO .0045	M/S
DEPTH	=	.23 TO .25	M
WIDTH	=	5.1 TO 7.8	M
BOD DECAY	-	.19 TO .19	PER DAY
NH3 DECAY	=	.00 TO .00	PER DAY
SDMNT OXYGEN DMRID	=	1.67 TO 2.66	G/SQ M/D
NH3 SOURC	-	.00 TO .00	G/SQ M/D
REAERATION	=	3.12 TO 3.47	PER DAY
BOD SETTLING	-	.12 TO .22	PER DAY
ORGN DECAY	=	.00 TO .00	PER DAY
ORGN SETTLING	-	.00 TO .00	PER DAY
TEMPERATURE	-	28.10 TO 28.10	DEG C
DISSOLVED OXYGEN	=	3.04 TO 5.37	MG/L

1 FINAL REPORT
 REACH NO. 10
 SILLS GULLY
 STILLIS GULLY

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCH
143	HDWTR	.0028	.00	.00	.0	.0	7.00	9.49	9.49	.00	.00	.00	.00	.0	0.	1.73
143	WSTLD	.0014	.00	.00	.0	.0	2.00	46.00	46.00	.00	.00	.00	.00	.0	0.	43.00

FINAL REPORT
REACH NO. 11

SILLS GULLY
SILLS BAYOU

BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
147	UPR RCH	.0042	28.10	.14	.0	.0	3.80	15.99	15.99	.00	1.00	1.00	1.00	.0	0.	11.60
147	WSTLD	.0028	.00	.00	.0	.0	7.00	9.50	9.50	.00	.00	.00	.00	.0	0.	1.70
150	WSTLD	.0019	.00	.00	.0	.0	2.00	46.00	46.00	.00	.00	.00	.00	.0	0.	43.00

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	REGIN DIST KM	ENDDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT ARFA SQ N	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
147	15.70	15.60	.0070	59.8	.015	.08	.21	2.2	47.	221.7	.5	0.	.000	.761	.015
148	15.60	15.50	.0070	59.8	.015	.08	.21	2.2	47.	221.7	.5	0.	.000	.761	.015
149	15.50	15.40	.0070	59.8	.015	.08	.21	2.2	47.	221.7	.5	0.	.000	.761	.015
150	15.40	15.30	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
151	15.30	15.20	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
152	15.20	15.10	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
153	15.10	15.00	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
154	15.00	14.90	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
155	14.90	14.80	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
156	14.80	14.70	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
157	14.70	14.60	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
158	14.60	14.50	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
159	14.50	14.40	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
160	14.40	14.30	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
161	14.30	14.20	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
162	14.20	14.10	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
163	14.10	14.00	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
164	14.00	13.90	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
165	13.90	13.80	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
166	13.80	13.70	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
167	13.70	13.60	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
168	13.60	13.50	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
169	13.50	13.40	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
170	13.40	13.30	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
171	13.30	13.20	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
172	13.20	13.10	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
173	13.10	13.00	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
174	13.00	12.90	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
175	12.90	12.80	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
176	12.80	12.70	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
177	12.70	12.60	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
178	12.60	12.50	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
179	12.50	12.40	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016
180	12.40	12.30	.0089	68.3	.016	.07	.22	2.5	55.	252.6	.6	0.	.000	.844	.016

ITEM NO.	ENDING DIST	SAT D.O. MG/L	REAR RATE 1/DA	CROD DECAY 1/DA	CROD SETT 1/DA	AUBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGH DECAY 1/DA	ORGH SETT 1/DA	IH3 DECAY 1/DA	IH3 SRCE *	DEHIT RATE 1/DA	P04 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	HCH DECAY 1/DA	HCH SETT 1/DA	NCH 1/DA
181	12.30	12.20	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
182	12.20	12.10	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
183	12.10	12.00	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
184	12.00	11.90	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
185	11.90	11.80	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
186	11.80	11.70	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
187	11.70	11.60	.0089	.19	.29	.015	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
188	11.60	11.50	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
189	11.50	11.40	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
190	11.40	11.30	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
191	11.30	11.20	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
192	11.20	11.10	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016
193	11.10	11.00	.0089	.19	.29	.016	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.016

TOT 3.40 2582. 11780.2 .5
 AVG .016 .22 2.5
 CUM 3.85

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	TEMP DF'S C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOT1 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	HCM *
177	12.600	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
178	12.500	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
179	12.400	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
180	12.300	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
181	12.200	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
182	12.100	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
183	12.000	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
184	11.900	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
185	11.800	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
186	11.700	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
187	11.600	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
188	11.500	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
189	11.400	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
190	11.300	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
191	11.200	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
192	11.100	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
193	11.000	7.81	3.89	.19	.29	.00	2.66	2.66	.00	.00	.00	.00	.00	.00	.00	.22	.06
20 DEG C RATE				.13	.29	.00	1.60	1.60	.00	.00	.00	.00	.00	.00	.00	9.48	.29
AVG 20 DEG C RATE			3.34						.00								

* G/SQ M/D

** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DF'S C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOT1 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	HCM *
147	15.600	28.10	.1	.0	.0	4.41	13.78	13.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.77
148	15.500	28.10	.1	.0	.0	4.16	13.81	13.81	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.15
149	15.400	28.10	.1	.0	.0	3.88	14.93	14.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.69
150	15.300	28.10	.1	.0	.0	3.46	18.77	18.77	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.04
151	15.200	28.10	.1	.0	.0	3.36	18.16	18.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.74
152	15.100	28.10	.1	.0	.0	3.29	17.57	17.57	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.44
153	15.000	28.10	.1	.0	.0	3.24	17.00	17.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.15
154	14.800	28.10	.1	.0	.0	3.22	16.44	16.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.87
155	14.800	28.10	.1	.0	.0	3.20	15.91	15.91	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.59
156	14.700	28.10	.1	.0	.0	3.20	15.39	15.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.32
157	14.600	28.10	.1	.0	.0	3.20	14.89	14.89	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.05
158	14.500	28.10	.1	.0	.0	3.21	14.41	14.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.79
159	14.400	28.10	.1	.0	.0	3.23	13.94	13.94	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.53
160	14.300	28.10	.1	.0	.0	3.25	13.49	13.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.28
161	14.200	28.10	.1	.0	.0	3.27	13.05	13.05	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.03
162	14.100	28.10	.1	.0	.0	3.30	12.62	12.62	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.79
163	14.000	28.10	.1	.0	.0	3.33	12.21	12.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.56
164	13.900	28.10	.1	.0	.0	3.36	11.81	11.81	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.32
165	13.800	28.10	.1	.0	.0	3.38	11.43	11.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.10
166	13.700	28.10	.1	.0	.0	3.41	11.06	11.06	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.87
167	13.600	28.10	.1	.0	.0	3.44	10.70	10.70	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.66
168	13.500	28.10	.1	.0	.0	3.47	10.35	10.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.44
169	13.400	28.10	.1	.0	.0	3.50	10.02	10.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.23
170	13.300	28.10	.1	.0	.0	3.53	9.69	9.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.03
171	13.200	28.10	.1	.0	.0	3.56	9.37	9.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.83
172	13.100	28.10	.1	.0	.0	3.59	9.07	9.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.63

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
173		13.000	28.10	.1	.0	8.77	8.77	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.44
174		12.900	28.10	.1	.0	3.64	8.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.25
175		12.800	28.10	.1	.0	3.67	8.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.06
176		12.700	28.10	.1	.0	3.69	7.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.88
177		12.600	28.10	.1	.0	3.72	7.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.70
179		12.500	28.10	.1	.0	3.74	7.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.53
179		12.400	28.10	.1	.0	3.77	7.20	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.36
180		12.300	28.10	.1	.0	3.79	6.96	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.19
181		12.200	28.10	.1	.0	3.81	6.74	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.02
182		12.100	28.10	.1	.0	3.83	6.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.86
183		12.000	28.10	.1	.0	3.86	6.30	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.70
184		11.900	28.10	.1	.0	3.88	6.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.55
185		11.800	28.10	.1	.0	3.90	5.90	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.40
186		11.700	28.10	.1	.0	3.92	5.71	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.25
187		11.600	28.10	.1	.0	3.94	5.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.10
188		11.500	28.10	.1	.0	3.95	5.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.96
189		11.400	28.10	.1	.0	3.97	5.17	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.82
190		11.300	28.10	.1	.0	3.99	5.01	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.68
191		11.200	28.10	.1	.0	4.01	4.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.53
192		11.100	28.10	.1	.0	4.05	4.71	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.37
193		11.000	28.10	.1	.0	4.12	4.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.14

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

1 FINAL REPORT SILLIS GULLY
 REACH NO. 12 RAYOU W/ROFF TO BEB
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****																
ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
194	UPR RCH	.0089	28.10	.11	.0	.0	4.12	4.61	4.61	.00	1.00	1.00	1.00	.0	0.	6.14
194	WSTLD	.0028	.00	.00	.0	.0	7.00	9.50	9.50	.00	.00	.00	.00	.0	0.	1.70

***** HYDRAULIC PARAMETER VALUES *****															
ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MPAI VELO M/S
194	11.00	10.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
195	10.00	9.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
196	9.00	8.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
197	8.00	7.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
198	7.00	6.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
199	6.00	5.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
200	5.00	4.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
201	4.00	3.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
202	3.00	2.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018
203	2.00	1.00	.0118	75.9	.018	.63	.24	2.7	639.	2665.8	.6	0.	.000	1.038	.018

204 1.00 .00 .0118 75.9 .018 .63 .24 2.7 639. 2665.8 .6 0. .000 1.038 .018
 TOT .018 .24 2.7 7032. 29323.7 .6
 AVG 10.77
 CUM

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDIMS DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CHOD SETT 1/DA	AMHOD DECAY 1/DA	FULL. SOD	CORR SOD	ORGN DECAY 1/DA	ORGN SETT 1/DA	HI3 DECAY 1/DA	NH3 SRCE	DENIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	NCM DECAY 1/DA	NCM SHFT 1/DA		
194	10.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
195	9.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
196	8.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
197	7.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
198	6.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
199	5.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
200	4.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
201	3.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
202	2.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
203	1.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
204	.000	7.81	3.61	.19	.17	.00	1.83	1.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.04	.04	
20	DEG C RATE			.13		.00	1.10		.00	.00	.00	.00	.00	.00	.00	.00	.00	9.61		.17	
AVG 20	DEG C RATE		3.10		.17				.00												

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTH MG/L	PHOS MG/L	CHL. A UG/L	MACRO **	COLI #/100ML	NCM
194	10.000	28.10	.1	.0	.0	5.03	4.69	4.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.46
195	9.000	28.10	.1	.0	.0	5.18	3.84	3.84	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.83
196	8.000	28.10	.1	.0	.0	5.28	3.14	3.14	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.28
197	7.000	28.10	.1	.0	.0	5.35	2.57	2.57	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.82
198	6.000	28.10	.1	.0	.0	5.41	2.11	2.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.42
199	5.000	28.10	.1	.0	.0	5.45	1.72	1.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.08
200	4.000	28.10	.1	.0	.0	5.49	1.41	1.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.78
201	3.000	28.10	.1	.0	.0	5.52	1.16	1.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.53
202	2.000	28.10	.1	.0	.0	5.55	.95	.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.32
203	1.000	28.10	.1	.0	.0	5.53	.92	.92	.00	1.00	1.00	2.00	1.00	.0	.0	0.	1.30
204	.000	28.10	.1	.0	.0	3.72	3.99	3.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.70

* CM-I = CHLORIDES MG/L

** G/CU M

CM-II = SULFATES MG/L

NCM = NBOD MG/L

1 STREAM SUMMARY
SILLS GULLY

BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUI

TRAVEL TIME = 10.8 DAYS

MAXIMUM EFFLUENT = 75.9 PERCENT

FLOW = .0042 TO .0118 CMS
 DISPERSION = .5018 TO 1.0376 SQ M/S
 VELOCITY = .0101 TO .0184 M/S
 DEPTH = .21 TO .24 M
 WIDTH = 2.0 TO 2.7 M
 BOD DECAY = .19 TO .19 PER DAY
 NH3 DECAY = .00 TO .00 PER DAY
 SEDIMENT OXYGEN DEMAND = 1.83 TO 2.66 G/SQ M/D
 NH3 SOURCE = .00 TO .00 G/SQ M/D
 REAERATION = 3.61 TO 3.92 PER DAY
 BOD SETTLING = .17 TO .29 PER DAY
 ORGH DECAY = .00 TO .00 PER DAY
 ORGH SETTLING = .00 TO .00 PER DAY

TEMPERATURE = 28.10 TO 28.10 DEG C
 DISSOLVED OXYGEN = 3.20 TO 5.55 MG/L

1 FINAL REPORT CROWLEY HIGH GULLY
 REACH NO. 14 CROWLEY HIGH TO BPB

BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUI

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	COLI #/100ML	CHL A UG/L	PHOS MG/L	NO3+2 MG/L	ORGH MG/L	INH3 MG/L	BOB MG/L	BOD MG/L	DO MG/L	CM-II *	CM-I *	MEAN VELO M/S	
209	HDWTR	.0000	.00	.00	.00	.0	.0	7.00	4.63	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	4.63	5.00	.0	.0	0.	6.80
209	WSTLD	.0013	.00	.00	.00	.0	.0	5.00	23.00	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	23.00	5.00	.0	.0	0.	21.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	COLI #/100ML	CHL A UG/L	PHOS MG/L	NO3+2 MG/L	ORGH MG/L	INH3 MG/L	BOB MG/L	BOD MG/L	DO MG/L	CM-II *	CM-I *	MEAN VELO M/S	
209	1.90	1.80	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
210	1.80	1.70	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
211	1.70	1.60	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
212	1.60	1.50	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
213	1.50	1.40	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
214	1.40	1.30	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
215	1.30	1.20	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
216	1.20	1.10	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002
217	1.10	1.00	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	0.	.0	.00	.00	.00	.00	.00	73.	5.00	.0	.0	0.	.002

218	1.00	.90	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
219	.90	.80	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
220	.80	.70	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
221	.70	.60	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
222	.60	.50	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
223	.50	.40	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
224	.40	.30	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
225	.30	.20	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
226	.20	.10	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
227	.10	.00	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002

TOT 12.21 1392. 6427.4 .7
 AVG .002 .22 3.4 .7
 CUM 12.21

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM HO.	ENDING DIST	SAT D.O. MG/L	RI/AER RATE L/DA	CBOD DEFCAY L/DA	CBOD SETT L/DA	ANBOD DEFCAY L/DA	FULL SOD *	CORR SOD *	ORGN DEFCAY L/DA	ORGN SETT L/DA	ORG1 DEFCAY L/DA	NH3 DEFCAY L/DA	NH3 SRCE	DENIT RATE L/DA	FO4 SRCE	ALG PROD **	MAC PROD **	COLI DEFCAY L/DA	COLI DEFCAY L/DA	NCM DEFCAY L/DA	NCM SETT L/DA
209	1.800	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
210	1.700	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
211	1.600	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
212	1.500	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
213	1.400	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
214	1.300	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
215	1.200	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
216	1.100	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
217	1.000	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
218	.900	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
219	.800	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
220	.700	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
221	.600	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
222	.500	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
223	.400	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
224	.300	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
225	.200	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
226	.100	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05
227	.000	7.81	3.56	.19	.26	.00	2.83	2.83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05

20 DEG C RATE .13 .26
 AVG 20 DEG C RATE 3.06 .00
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

FILEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
209	1.800	28.10	.1	.0	.0	3.39	16.99	16.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.99
210	1.700	28.10	.1	.0	.0	3.13	13.83	13.83	.00	1.00	1.00	2.00	1.00	.0	.0	0.	17.46

211	1.600	28.10	.1	.0	3.14	11.33	11.33	.00	1.00	1.00	2.00	1.00	.0	0.	16.06
212	1.500	28.10	.1	.0	3.22	9.34	9.34	.00	1.00	1.00	2.00	1.00	.0	0.	14.77
213	1.400	28.10	.1	.0	3.33	7.76	7.76	.00	1.00	1.00	2.00	1.00	.0	0.	13.58
214	1.300	28.10	.1	.0	3.42	6.50	6.50	.00	1.00	1.00	2.00	1.00	.0	0.	12.49
215	1.200	28.10	.1	.0	3.50	5.50	5.50	.00	1.00	1.00	2.00	1.00	.0	0.	11.49
216	1.100	28.10	.1	.0	3.57	4.70	4.70	.00	1.00	1.00	2.00	1.00	.0	0.	10.57
217	1.000	28.10	.1	.0	3.63	4.07	4.07	.00	1.00	1.00	2.00	1.00	.0	0.	9.72
218	.900	28.10	.1	.0	3.68	3.57	3.57	.00	1.00	1.00	2.00	1.00	.0	0.	8.94
219	.800	28.10	.1	.0	3.72	3.17	3.17	.00	1.00	1.00	2.00	1.00	.0	0.	8.22
220	.700	28.10	.1	.0	3.76	2.86	2.86	.00	1.00	1.00	2.00	1.00	.0	0.	7.56
221	.600	28.10	.1	.0	3.79	2.60	2.60	.00	1.00	1.00	2.00	1.00	.0	0.	6.95
222	.500	28.10	.1	.0	3.82	2.41	2.41	.00	1.00	1.00	2.00	1.00	.0	0.	6.40
223	.400	28.10	.1	.0	3.84	2.26	2.26	.00	1.00	1.00	2.00	1.00	.0	0.	5.90
224	.300	28.10	.1	.0	3.95	2.16	2.16	.00	1.00	1.00	2.00	1.00	.0	0.	5.49
225	.200	28.10	.1	.0	3.85	2.19	2.19	.00	1.00	1.00	2.00	1.00	.0	0.	5.23
226	.100	28.10	.1	.0	3.79	2.58	2.58	.00	1.00	1.00	2.00	1.00	.0	0.	5.40
227	.000	28.10	.1	.0	3.36	4.25	4.25	.00	1.00	1.00	2.00	1.00	.0	0.	6.86

* CM-1 = CHLORIDES MG/L
 ** G/CU M
 CM-11 = SULFATES MG/L
 HCM - MBOD MG/L

1
 STREAM SUMMARY
 CROWLEY HIGH GULLY
 BAYOU PLAQUEMINNE BRUIE WATERSHED
 SUMMER PROJECTION RUN

TRAVEL TIME = 12.2 DAYS
 MAXIMUM EFFLUENT = 100.0 PERCENT

FLOW = .0013 TO .0013 CMS
 DISPERSION = .0928 TO .0928 SQ M/S
 VELOCITY = .0018 TO .0018 M/S
 DEPTH = .22 TO .22 M
 WIDTH = 3.4 TO 3.4 M
 BOD DECAY = .19 TO .19 PER DAY
 NH3 DECAY = .00 TO .00 PER DAY
 SDMNT OXYGEN DMND = 2.83 TO 2.83 G/SQ M/D
 NH3 SOURCE = .00 TO .00 G/SQ M/D
 REAERATION = 3.56 TO 3.56 PER DAY
 BOD SETTLING = .26 TO .26 PER DAY
 ORGN DECAY = .00 TO .00 PER DAY
 ORGN SETTLING = .00 TO .00 PER DAY

TEMPERATURE = 28.10 TO 28.10 DEG C
 DISSOLVED OXYGEN = 3.13 TO 3.85 MG/L

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
287	25.600	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
288	25.500	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
289	25.400	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
290	25.300	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
291	25.200	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
292	25.100	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
293	25.000	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
294	24.900	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
295	24.800	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
296	24.700	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
297	24.600	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
298	24.500	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
299	24.400	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
300	24.300	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
301	24.200	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
302	24.100	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
303	24.000	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
304	23.900	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
305	23.800	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
306	23.700	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
307	23.600	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
308	23.500	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
309	23.400	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
310	23.300	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
311	23.200	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03
312	23.100	7.81	6.33	.07	.26	3.00	3.00	3.00	.00	.00	.00	.00	.00	.00	.00	.17	.03

20 DEG C RATE .05 1.80 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .15
 AVG 20 DEG C RATE 5.44 .26 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .15

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
287	25.600	28.10	.1	.0	.0	5.04	22.57	22.57	.00	1.00	1.00	2.00	1.00	.0	.0	0.	21.11
288	25.500	28.10	.1	.0	.0	5.02	22.49	22.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	21.06
289	25.400	28.10	.1	.0	.0	5.00	22.41	22.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	21.02
290	25.300	28.10	.1	.0	.0	4.98	22.34	22.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.98
291	25.200	28.10	.1	.0	.0	4.96	22.26	22.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.93
292	25.100	28.10	.1	.0	.0	4.95	22.18	22.18	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.89
293	25.000	28.10	.1	.0	.0	4.94	22.10	22.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.84
294	24.900	28.10	.1	.0	.0	4.92	22.02	22.02	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.80
295	24.800	28.10	.1	.0	.0	4.91	21.95	21.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.76
296	24.700	28.10	.1	.0	.0	4.90	21.87	21.87	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.71
297	24.600	28.10	.1	.0	.0	4.89	21.79	21.79	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.67
298	24.500	28.10	.1	.0	.0	4.88	21.72	21.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.63
299	24.400	28.10	.1	.0	.0	4.87	21.64	21.64	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.58
300	24.300	28.10	.1	.0	.0	4.86	21.57	21.57	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.54
301	24.200	28.10	.1	.0	.0	4.86	21.49	21.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.50
302	24.100	28.10	.1	.0	.0	4.85	21.42	21.42	.00	1.00	1.00	2.00	1.00	.0	.0	0.	20.45

CM-I - CHLORIDES	CM-II - SULFATES	NCHM - NBOD												
MG/L	MG/L	MG/L												
** G/CU M														
303	24.000	28.10	.1	.0	4.84	21.34	21.34	.00	1.00	2.00	1.00	.0	.0	20.41
304	23.900	28.10	.1	.0	4.84	21.27	21.27	.00	1.00	2.00	1.00	.0	.0	20.37
305	23.800	28.10	.1	.0	4.83	21.19	21.19	.00	1.00	2.00	1.00	.0	.0	20.32
306	23.700	28.10	.1	.0	4.82	21.12	21.12	.00	1.00	2.00	1.00	.0	.0	20.28
307	23.600	28.10	.1	.0	4.82	21.04	21.04	.00	1.00	2.00	1.00	.0	.0	20.23
308	23.500	28.10	.1	.0	4.81	20.95	20.95	.00	1.00	2.00	1.00	.0	.0	20.18
309	23.400	28.10	.1	.0	4.79	20.84	20.84	.00	1.00	2.00	1.00	.0	.0	20.10
310	23.300	28.10	.1	.0	4.74	20.65	20.65	.00	1.00	2.00	1.00	.0	.0	19.95
311	23.200	28.10	.1	.0	4.59	20.24	20.24	.00	1.00	2.00	1.00	.0	.0	19.59

* CM-I - CHLORIDES
 MG/L
 ** G/CU M
 * CM-II - SULFATES
 MG/L
 NCHM - NBOD
 MG/L

1. FINAL REPORT BAYOU BLANC
 REACH NO. 18 LAKE
 BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELFM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CH-I	CM-II	DO	BOD	EBOD	ORGN	NH3	NO3+2	PHOS	CHL A	COLI	NCH
312	UPR RCH	.0850	28.10	.12	.0	.0	4.59	20.24	20.24	.00	1.00	1.00	1.00	.0	0.	19.59

***** HYDRAULIC PARAMETER VALUES *****

FILEM NO.	BEGIII DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
312	23.20	23.10	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
313	23.10	23.00	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
314	23.00	22.90	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
315	22.90	22.80	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007

TOT 1706.
 AVG .64
 CUM .91
 15686.3
 11.8

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D-O. MG/L	REAER RATE L/DA	CBOD DECAY L/DA	ANBOD DECAY L/DA	FULL SOD	CORR SOD	ORGN DECAY L/DA	ORGN SETT L/DA	NH3 DECAY L/DA	NH3 SRCE	DNIT RATE L/DA	P04 SRCE	ALG PROD	MAC PROD	COLI DECAY L/DA	NCM DECAY L/DA	NCM SETT
312	23.100	7.81	2.70	.13	.16	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.03
313	23.000	7.81	2.70	.13	.16	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.03
314	22.900	7.81	2.70	.13	.16	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.03
315	22.800	7.81	2.70	.13	.16	.00	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.25	.03
20 DEG C RATE			.09		.16		1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.52	.10
AVG 20 DEG C RATE			2.32		.16		.00	.00										

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	ROD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
312	23.100	28.10	.1	.0	.0	4.19	19.31	19.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.74
313	23.000	28.10	.1	.0	.0	3.95	18.46	18.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	17.97
314	22.900	28.10	.1	.0	.0	3.79	17.66	17.66	.00	1.00	1.00	2.00	1.00	.0	.0	0.	17.24
315	22.800	28.10	.1	.0	.0	3.71	16.89	16.89	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.53

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L

** G/GU M

1 FINAL REPORT BAYOU BLANC REACH NO. 19 LAKE

BAYOU PLAQUEMINE BRULE WATERSHED SUMMER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NIH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
316	UPR RCH	.0850	28.10	.12	.0	.0	3.71	16.89	16.89	.00	1.00	1.00	1.00	.0	.0	0.	16.53

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADYCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
316	22.80	22.70	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
317	22.70	22.60	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
318	22.60	22.50	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
319	22.50	22.40	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
320	22.40	22.30	.0850	96.7	.007	.16	.30	39.2	1176.	3921.6	11.8	0.	.000	.491	.007
TOT					.007	.80	.30	39.2	5882.	19607.8	11.8				
AVG						1.71									
CUM															

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REARR RATE 1/DA	CBOD DECAY 1/DA	PROD SETT 1/DA	AMBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGN DECAY 1/DA	ORGN SETT 1/DA	ORGN 1/DA	NR3 DECAY 1/DA	NH3 SRCE *	NR3 DENIT RATE 1/DA	FO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	MACRO DECAY 1/DA	CHL A UG/L	PHOS MG/L	TOTN MG/L	NR3+2 MG/L	NR3 MG/L	ORGN MG/L	EBOD MG/L	BOD MG/L	DO MG/L	CM-II *	CM-I *	SALN PPT	TEMP DEG C	ENDING DIST	CHLORIDES MG/L	SULFATES MG/L	NCM = NBOD MG/L		
316	22.700	7.81	2.70	.13	.16	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	1.00	1.00	1.00	1.00	16.15	16.15	3.67	.0	.0	.1	28.10	22.700				
317	22.600	7.81	2.70	.13	.16	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	1.00	1.00	1.00	1.00	15.46	15.46	3.66	.0	.0	.1	28.10	22.600				
318	22.500	7.81	2.70	.13	.16	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	1.00	1.00	1.00	1.00	14.81	14.81	3.68	.0	.0	.1	28.10	22.500				
319	22.400	7.81	2.70	.13	.16	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	1.00	1.00	1.00	1.00	14.24	14.24	3.71	.0	.0	.1	28.10	22.400				
320	22.300	7.81	2.70	.13	.16	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	1.00	1.00	1.00	1.00	13.83	13.83	3.74	.0	.0	.1	28.10	22.300				
20 DEG C RATE			2.32	.09	.16	.00	1.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.00	1.00	1.00	1.00	8.39	8.39										
AVG 20 DEG C RATE																																						
* G/SQ M/D																																						

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NR3 MG/L	NR3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
316	22.700	28.10	.1	.0	.0	3.67	16.15	16.15	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.85
317	22.600	28.10	.1	.0	.0	3.66	15.46	15.46	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.21
318	22.500	28.10	.1	.0	.0	3.68	14.81	14.81	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.61
319	22.400	28.10	.1	.0	.0	3.71	14.24	14.24	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.06
320	22.300	28.10	.1	.0	.0	3.74	13.83	13.83	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.62

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II - SULFATES MG/L
 NCM = NBOD MG/L

***** REACH INPUTS *****																	
ELFEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I	TRAVEL TIME DAYS	DEPTH M	WIDTH M	BOD MG/L	EUOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS HG/L	CHL A UG/L	COL1 #/100ML	HCM
321	UPR	RCH	28.10	.13	.0	.0	3.74	13.83	13.83	.00	1.00	1.00	1.00	1.00	.0	0.	13.62
***** HYDRAULIC PARAMETER VALUES *****																	
ELFEM NO.	BEGIN DIST	ENDIN DIST	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S		
321	22.30	22.00	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
322	22.00	21.70	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
323	21.70	21.40	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
324	21.40	21.10	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
325	21.10	20.80	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
326	20.80	20.50	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
327	20.50	20.20	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
328	20.20	19.90	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
329	19.90	19.60	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
330	19.60	19.30	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
331	19.30	19.00	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
332	19.00	18.70	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
333	18.70	18.40	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
334	18.40	18.10	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
335	18.10	17.80	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
336	17.80	17.50	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
337	17.50	17.20	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
338	17.20	16.90	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
339	16.90	16.60	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
340	16.60	16.30	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
341	16.30	16.00	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
342	16.00	15.70	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
343	15.70	15.40	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
344	15.40	15.10	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
345	15.10	14.80	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
346	14.80	14.50	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
347	14.50	14.20	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
348	14.20	13.90	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
349	13.90	13.60	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
350	13.60	13.30	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
351	13.30	13.00	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
352	13.00	12.70	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
353	12.70	12.40	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
354	12.40	12.10	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
355	12.10	11.80	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		
356	11.80	11.50	.0850	96.7	.035	.10	.48	5.1	727.	1516.4	2.4	0.	.000	3.522	.035		

FILEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	PH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCFI *
347	14.200	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
348	13.900	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
349	13.600	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
350	13.300	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
351	13.000	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
352	12.700	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
353	12.400	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
354	12.100	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
355	11.800	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
356	11.500	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
357	11.200	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
358	10.900	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
359	10.600	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
360	10.300	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
361	10.000	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
362	9.700	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
363	9.400	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
364	9.100	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
365	8.800	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
366	8.500	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
367	8.200	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
368	7.900	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
369	7.600	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
370	7.300	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
371	7.000	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
372	6.700	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
373	6.400	7.81	1.98	.09	.00	.00	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.26	.00
20 DEG C RATE				.06	.00	.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	8.26	.00
AVG 20 DEG C RATE			1.70														

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

FILEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	PH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCFI *
321	22.000	28.10	.1	.0	.0	3.73	13.72	13.72	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.31
322	21.700	28.10	.1	.0	.0	3.74	13.60	13.60	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.97
323	21.400	28.10	.1	.0	.0	3.75	13.49	13.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.65
324	21.100	28.10	.1	.0	.0	3.76	13.37	13.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.33
325	20.800	28.10	.1	.0	.0	3.78	13.26	13.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.02
326	20.500	28.10	.1	.0	.0	3.81	13.15	13.15	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.72
327	20.200	28.10	.1	.0	.0	3.83	13.03	13.03	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.43
328	19.900	28.10	.1	.0	.0	3.86	12.92	12.92	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.14
329	19.600	28.10	.1	.0	.0	3.89	12.81	12.81	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.87
330	19.300	28.10	.1	.0	.0	3.93	12.70	12.70	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.59
331	19.000	28.10	.1	.0	.0	3.96	12.59	12.59	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.33
332	18.700	28.10	.1	.0	.0	4.00	12.49	12.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.07
333	18.400	28.10	.1	.0	.0	4.03	12.38	12.38	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.82
334	18.100	28.10	.1	.0	.0	4.07	12.28	12.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.57
335	17.800	28.10	.1	.0	.0	4.10	12.17	12.17	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.33
336	17.500	28.10	.1	.0	.0	4.14	12.07	12.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.10

337	17.200	28.10	.1	.0	4.17	11.96	11.96	.00	1.00	1.00	2.00	1.00	-0	.0	0.	8.87
338	16.900	28.10	.1	.0	4.21	11.86	11.86	.00	1.00	1.00	2.00	1.00	-0	.0	0.	8.65
339	16.600	28.10	.1	.0	4.24	11.76	11.76	.00	1.00	1.00	2.00	1.00	-0	.0	0.	8.44
340	16.300	28.10	.1	.0	4.28	11.66	11.66	.00	1.00	1.00	2.00	1.00	-0	.0	0.	8.22
341	16.000	28.10	.1	.0	4.31	11.56	11.56	.00	1.00	1.00	2.00	1.00	-0	.0	0.	8.02
342	15.700	28.10	.1	.0	4.34	11.46	11.46	.00	1.00	1.00	2.00	1.00	-0	.0	0.	7.82
343	15.400	28.10	.1	.0	4.38	11.37	11.37	.00	1.00	1.00	2.00	1.00	-0	.0	0.	7.62
344	15.100	28.10	.1	.0	4.41	11.27	11.27	.00	1.00	1.00	2.00	1.00	-0	.0	0.	7.43
345	14.800	28.10	.1	.0	4.44	11.17	11.17	.00	1.00	1.00	2.00	1.00	-0	.0	0.	7.25
346	14.500	28.10	.1	.0	4.47	11.08	11.08	.00	1.00	1.00	2.00	1.00	-0	.0	0.	7.07
347	14.200	28.10	.1	.0	4.50	10.98	10.98	.00	1.00	1.00	2.00	1.00	-0	.0	0.	6.89
348	13.900	28.10	.1	.0	4.53	10.89	10.89	.00	1.00	1.00	2.00	1.00	-0	.0	0.	6.72
349	13.600	28.10	.1	.0	4.56	10.80	10.80	.00	1.00	1.00	2.00	1.00	-0	.0	0.	6.55
350	13.300	28.10	.1	.0	4.59	10.71	10.71	.00	1.00	1.00	2.00	1.00	-0	.0	0.	6.38
351	13.000	28.10	.1	.0	4.62	10.61	10.61	.00	1.00	1.00	2.00	1.00	-0	.0	0.	6.23
352	12.700	28.10	.1	.0	4.65	10.52	10.52	.00	1.00	1.00	2.00	1.00	-0	.0	0.	6.07
353	12.400	28.10	.1	.0	4.67	10.43	10.43	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.92
354	12.100	28.10	.1	.0	4.70	10.35	10.35	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.77
355	11.800	28.10	.1	.0	4.72	10.26	10.26	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.63
356	11.500	28.10	.1	.0	4.75	10.17	10.17	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.48
357	11.200	28.10	.1	.0	4.77	10.08	10.08	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.35
358	10.900	28.10	.1	.0	4.80	10.00	10.00	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.21
359	10.600	28.10	.1	.0	4.82	9.91	9.91	.00	1.00	1.00	2.00	1.00	-0	.0	0.	5.08
360	10.300	28.10	.1	.0	4.85	9.83	9.83	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.96
361	10.000	28.10	.1	.0	4.87	9.74	9.74	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.83
362	9.700	28.10	.1	.0	4.89	9.66	9.66	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.71
363	9.400	28.10	.1	.0	4.91	9.58	9.58	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.59
364	9.100	28.10	.1	.0	4.93	9.50	9.50	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.48
365	8.800	28.10	.1	.0	4.95	9.42	9.42	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.37
366	8.500	28.10	.1	.0	4.97	9.34	9.34	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.26
367	8.200	28.10	.1	.0	4.99	9.26	9.26	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.15
368	7.900	28.10	.1	.0	5.01	9.17	9.17	.00	1.00	1.00	2.00	1.00	-0	.0	0.	4.05
369	7.600	28.10	.1	.0	5.03	9.09	9.09	.00	1.00	1.00	2.00	1.00	-0	.0	0.	3.95
370	7.300	28.10	.1	.0	5.04	8.98	8.98	.00	1.00	1.00	2.00	1.00	-0	.0	0.	3.84
371	7.000	28.10	.1	.0	5.02	8.78	8.78	.00	1.00	1.00	2.00	1.00	-0	.0	0.	3.74
372	6.700	28.10	.1	.0	4.86	8.19	8.19	.00	1.00	1.00	2.00	1.00	-0	.0	0.	3.60
373	6.400	28.10	.1	.0	3.99	6.06	6.06	.00	1.00	1.00	2.00	1.00	-0	.0	0.	3.35

* CM-I - CHLORIDES MG/L
 ** G/CU M
 HCH - NBOD MG/L

1
 FINAL REPORT BAYOU BLANC
 REACH NO. 21 RK 6.4 TO BPB

BAYOU PLAQUEMINE BRUILE WATERSHED
 SUMMER PROJECTION RUN

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
374	UPR RCH	.0850	28.10	.13	.0	.0	3.99	6.06	6.06	.00	1.00	1.00	1.00	.0	0.	3.35

***** REACH INPUTS *****

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	REGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME: DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL ERISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
374	6.40	6.00	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	474.	.000	8.000	.003
375	6.00	5.60	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	948.	.001	8.000	.003
376	5.60	5.20	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	1421.	.001	8.000	.003
377	5.20	4.80	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	1895.	.001	8.000	.003
378	4.80	4.40	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	2369.	.002	8.000	.003
379	4.40	4.00	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	2843.	.002	8.000	.003
380	4.00	3.60	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	3316.	.003	8.000	.003
381	3.60	3.20	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	3790.	.003	8.000	.004
382	3.20	2.80	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	4264.	.003	8.000	.004
383	2.80	2.40	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	4738.	.004	8.000	.004
384	2.40	2.00	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	5211.	.004	8.000	.005
385	2.00	1.60	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	5685.	.004	8.000	.005
386	1.60	1.20	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	6159.	.005	8.000	.005
387	1.20	.80	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	6633.	.005	8.000	.006
388	.80	.40	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	7106.	.006	8.000	.006
389	.40	.00	.0850	96.7	.003	1.56	1.43	20.0	11429.	7992.0	28.6	7580.	.006	8.000	.006

TOT 24.90 182857. 127872.1
 AVG .003 1.43 20.0 28.6
 CUM 31.86

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REARER RATE 1/DA	CROD DECAY 1/EA	CROD SETT 1/DA	AMBOD DECAY 1/DA	FULL. SOD	SOD	CORR SOD	ORGN DECA 1/DA	ORGN SITT 1/DA	NH3 DECA 1/DA	NH3 SRCE	DEBIT RATE 1/DA	FO4 SRCE	ALG PROD **	MAC PROD **	COLI DECA 1/DA	HGM DECA 1/DA	HGM SETT 1/DA	
374	6.000	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
375	5.600	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
376	5.200	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
377	4.800	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
378	4.400	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
379	4.000	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
380	3.600	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
381	3.200	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
382	2.800	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
383	2.400	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
384	2.000	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
385	1.600	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
386	1.200	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
387	.800	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
388	.400	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
389	.000	7.81	.55	.13	.00	.00	1.67	1.67	1.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00

20 DEG C RATE .09
 AVG 20 DEG C RATE .47
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELFHM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCH *
374	6.000	28.10	.1	.0	.0	3.68	5.44	5.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.29
375	5.600	28.10	.1	.0	.0	3.53	5.05	5.05	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.27
376	5.200	28.10	.1	.0	.0	3.43	4.70	4.70	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.25
377	4.800	28.10	.1	.0	.0	3.37	4.39	4.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.25
378	4.400	28.10	.1	.0	.0	3.32	4.11	4.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.26
379	4.000	28.10	.1	.0	.0	3.30	3.87	3.87	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.29
380	3.600	28.10	.1	.0	.0	3.27	3.66	3.66	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.34
381	3.200	28.10	.1	.0	.0	3.25	3.47	3.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.42
382	2.800	28.10	.1	.0	.0	3.23	3.31	3.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.54
383	2.400	28.10	.1	.0	.0	3.20	3.18	3.18	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.70
384	2.000	28.10	.1	.0	.0	3.17	3.08	3.08	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.94
385	1.600	28.10	.1	.0	.0	3.14	3.00	3.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.26
386	1.200	28.10	.1	.0	.0	3.12	2.95	2.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.71
387	.800	28.10	.1	.0	.0	3.16	2.93	2.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.33
388	.400	28.10	.1	.0	.0	3.28	2.95	2.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.18
389	.000	28.10	.1	.0	.0	3.57	3.01	3.01	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.34

* CM-I - CHLORIDES MG/L
 ** G/GU M
 CM-II - SULFATES MG/L
 NCH - NBOD MG/L

1
 STREAM SUMMARY
 BAYOU BLANC

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

TRAVEL TIME	=	31.9 DAYS
MAXIMUM EFFLUENT	=	96.7 PERCENT
FLOW	=	.0850 CFS
DISPERSION	=	.4910 TO 6.0000 SQ M/S
VELOCITY	=	.0030 TO .1095 M/S
DEPTH	=	.21 TO 1.43 M
WIDTH	=	3.7 TO 39.2 M
BOD DECAY	=	.07 TO .13 PER DAY
NH3 DECAY	=	.00 TO .00 PER DAY
SDMT OXYGEN DM/D	=	1.67 TO 3.00 G/SQ M/D
NH3 SOURCE	=	.00 TO .00 G/SQ M/D
REAERATION	=	.55 TO 6.33 PER DAY
BOD SETTLING	=	.00 TO .26 PER DAY
ORGN DECAY	=	.00 TO .00 PER DAY
ORGN SETTLING	=	.00 TO .00 PER DAY
TEMPERATURE	=	28.10 TO 28.10 DEG C
DISSOLVED OXYGEN	=	3.12 TO 5.04 MG/L

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAR RATE 1/DA	CBOD DECY 1/DA	CBOD SETT 1/DA	ANBOD DECY 1/DA	FULL SOD *	CORR SOD *	EROD MG/L	ORGN DECY 1/DA	ORGN SETT 1/DA	NH3 DECY 1/DA	NH3 SRCE *	DENIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA		
395	.900	7.81	3.93	.19	.28	.00	2.83	2.83	14.31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
396	.800	7.81	3.93	.19	.28	.00	2.83	2.83	13.61	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
397	.700	7.81	3.93	.19	.28	.00	2.83	2.83	12.95	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
398	.600	7.81	3.93	.19	.28	.00	2.83	2.83	12.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
399	.500	7.81	3.93	.19	.28	.00	2.83	2.83	11.71	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
400	.400	7.81	3.93	.19	.28	.00	2.83	2.83	11.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
401	.300	7.81	3.93	.19	.28	.00	2.83	2.93	10.43	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
402	.200	7.81	3.93	.19	.28	.00	2.83	2.83	9.49	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
403	.100	7.81	3.93	.19	.28	.00	2.83	2.83	7.67	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
404	.000	7.81	3.93	.19	.28	.00	2.83	2.83	3.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	
20 DEG C RATE			.13					1.70						.00	.00						7.36	.28
AVG 20 DEG C RATE			3.38		.28																	

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTI MG/L	PHOS MG/L	CHL A US/L	MACRO **	COLI #/100ML	NCM *
395	.900	28.10	.1	.0	.0	4.00	14.31	14.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.90
396	.800	28.10	.1	.0	.0	3.62	13.61	13.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.34
397	.700	28.10	.1	.0	.0	3.37	12.95	12.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	17.78
398	.600	28.10	.1	.0	.0	3.20	12.32	12.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	17.24
399	.500	28.10	.1	.0	.0	3.10	11.71	11.71	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.71
400	.400	28.10	.1	.0	.0	3.04	11.10	11.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.16
401	.300	28.10	.1	.0	.0	3.03	10.43	10.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.52
402	.200	28.10	.1	.0	.0	3.07	9.49	9.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.59
403	.100	28.10	.1	.0	.0	3.24	7.67	7.67	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.71
404	.000	28.10	.1	.0	.0	3.74	3.01	3.01	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.84

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = NR0D MG/L

** G/CU M

1
STREAM SUMMARY
N. COULEE TRIFF

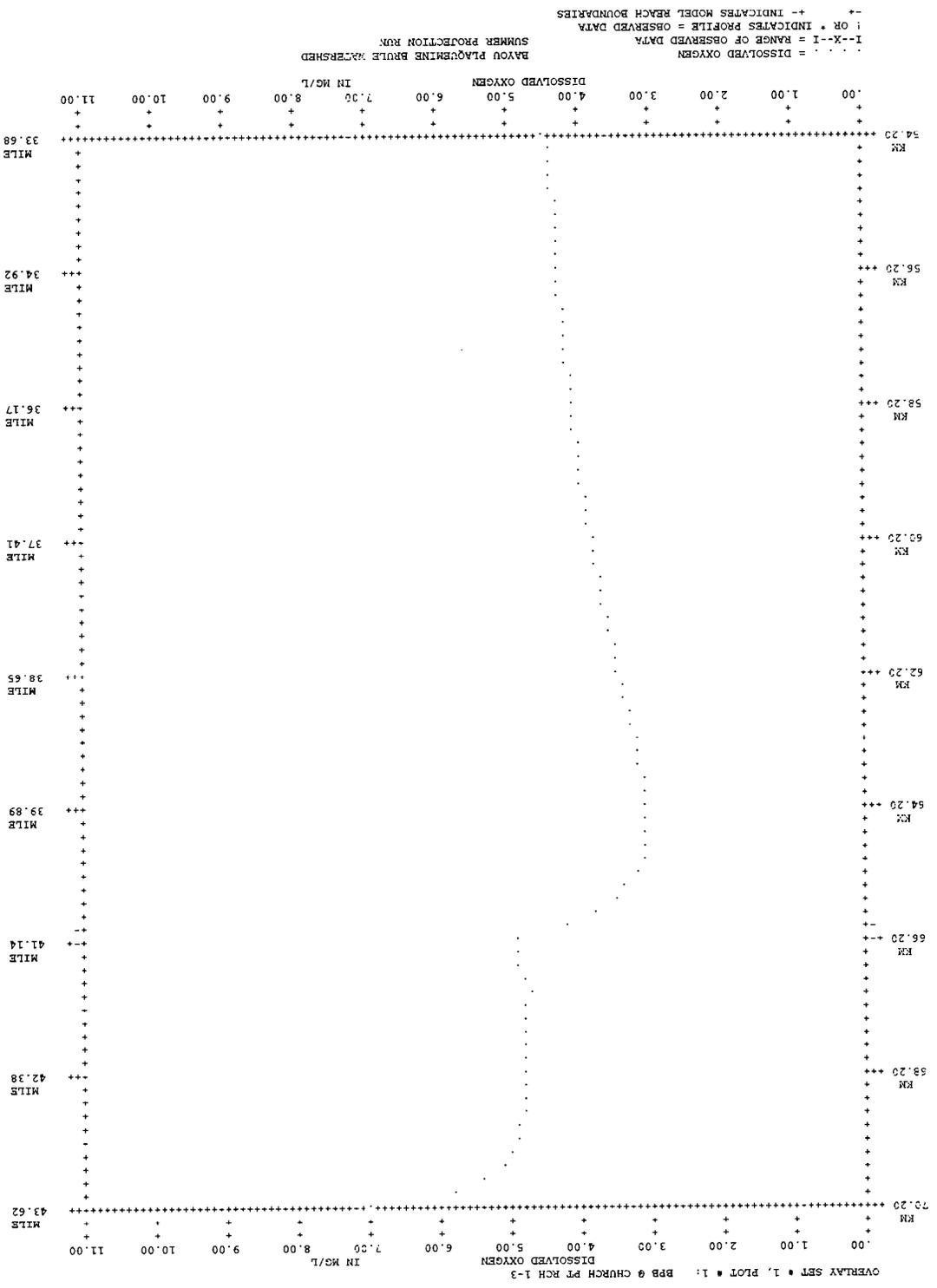
BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUN

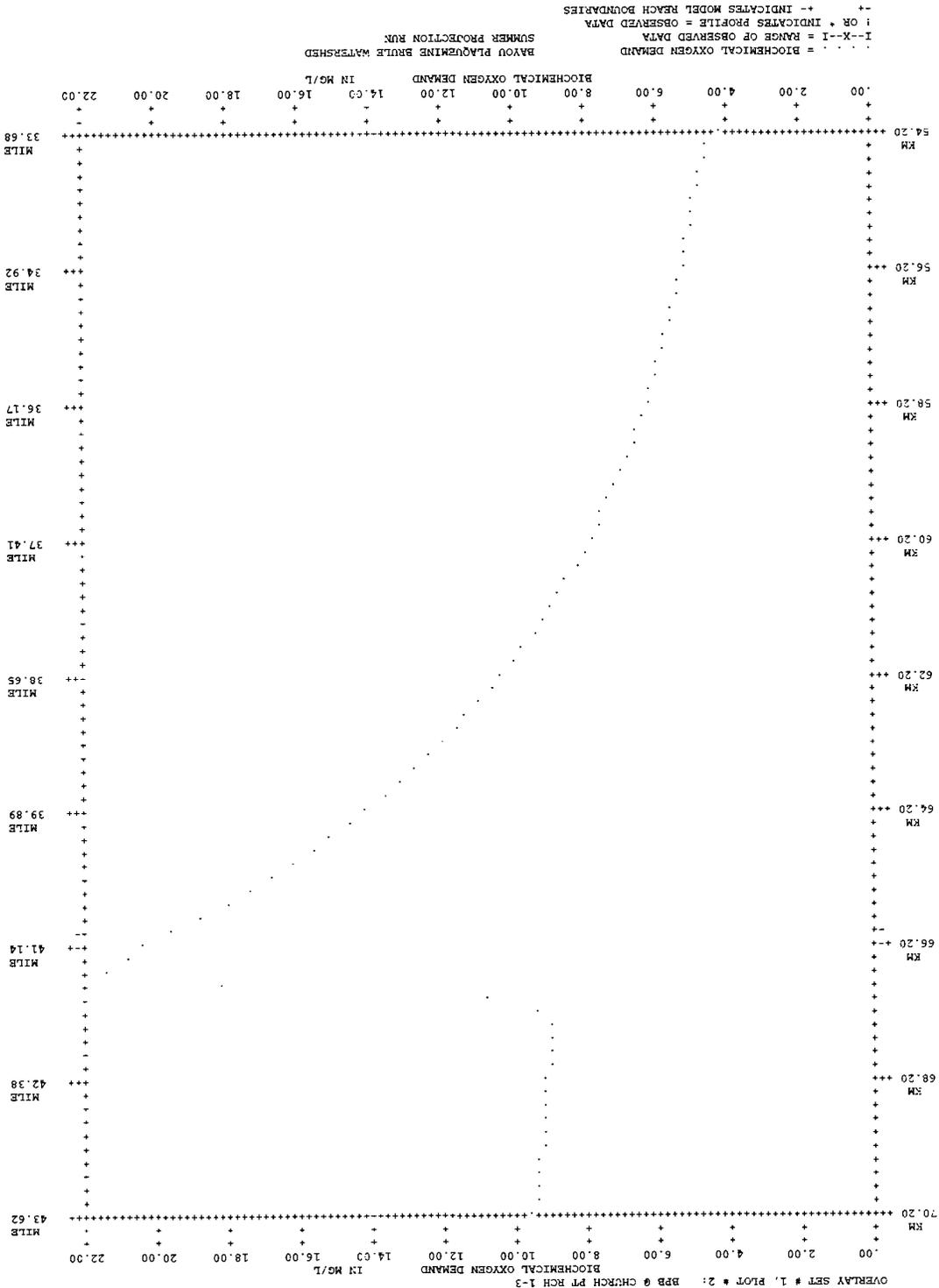
TRAVEL TIME = 1.1 DAYS

MAXIMUM EFFLUENT = 43.7 PERCENT

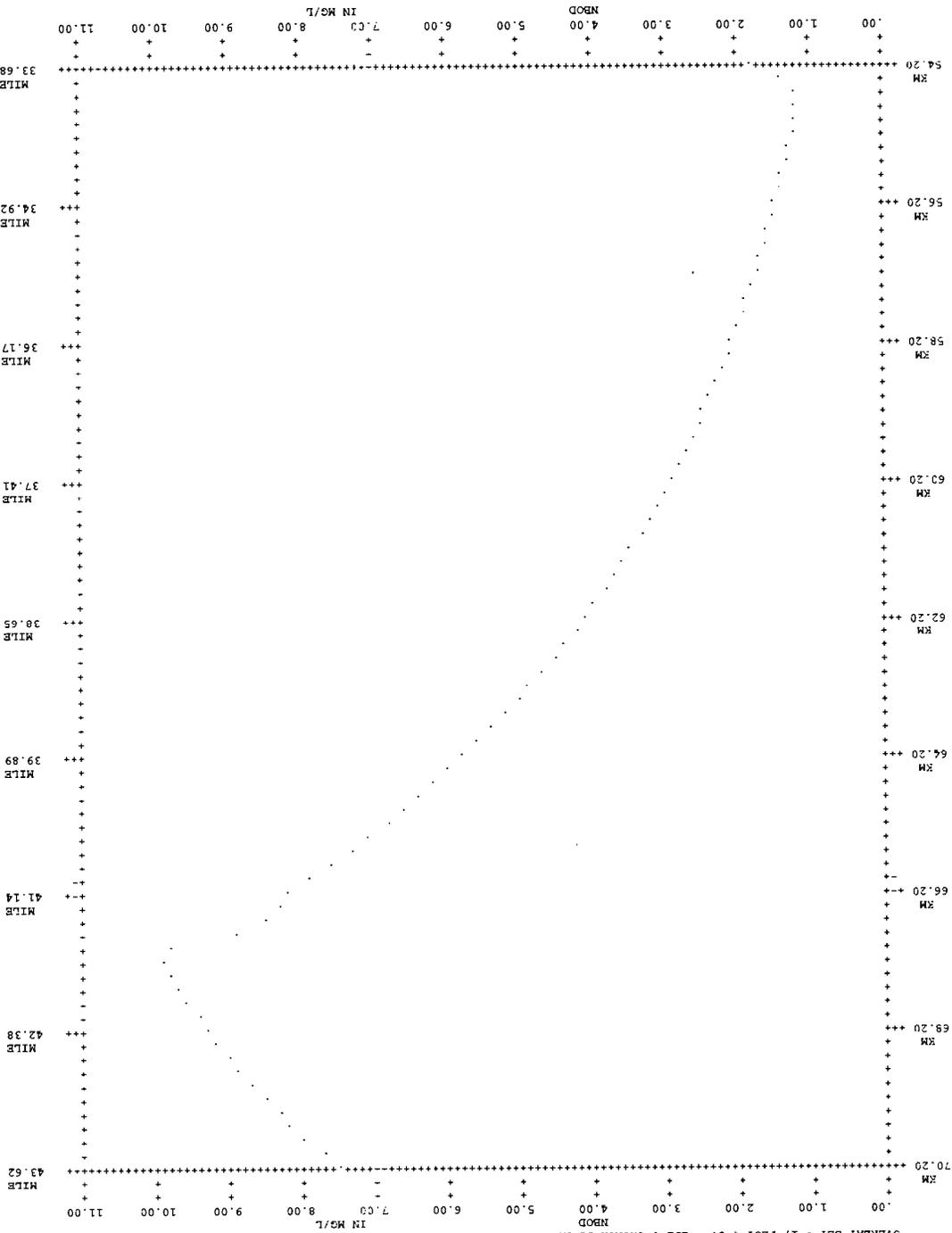
FLOW = .0050 TO .0050 CMS
DISPERSION = .5190 TO .5190 SQ M/S
VELOCITY = .0104 TO .0104 M/S
DEPTH = .21 TO .21 M

WIDTH	=	2.3	TO	2.3	M
BOD DECAY	=	.19	TO	.19	PER DAY
NH3 DECAY	=	.00	TO	.00	PER DAY
SDMNT OXYGEN DMND	=	2.83	TO	2.83	G/SQ M/D
NH3 SOURCE	=	.00	TO	.00	G/SQ M/D
REGENERATION	=	3.93	TO	3.93	PER DAY
BOD SETTLING	=	.28	TO	.28	PER DAY
ORGN DECAY	=	.00	TO	.00	PER DAY
ORGN SETTLING	=	.00	TO	.00	PER DAY
TEMPERATURE	=	28.10	TO	28.10	DEG C
DISSOLVED OXYGEN	=	3.03	TO	4.00	MG/L





OVERLAY SET # 1, PLOT # 3: BPB @ CHURCH PT RCH 1-3



..... = NBOD
I-X-I = RANGE OF OBSERVED DATA
: OR * INDICATES PROFILE = OBSERVED DATA
-- INDICATES MODEL REACH BOUNDARIES

SUMMER PROTECTION RUN

BAYOU LAPOUENINE BRULE WATERSHED

IN MG/L

NBOD

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3.00

2.00

1.00

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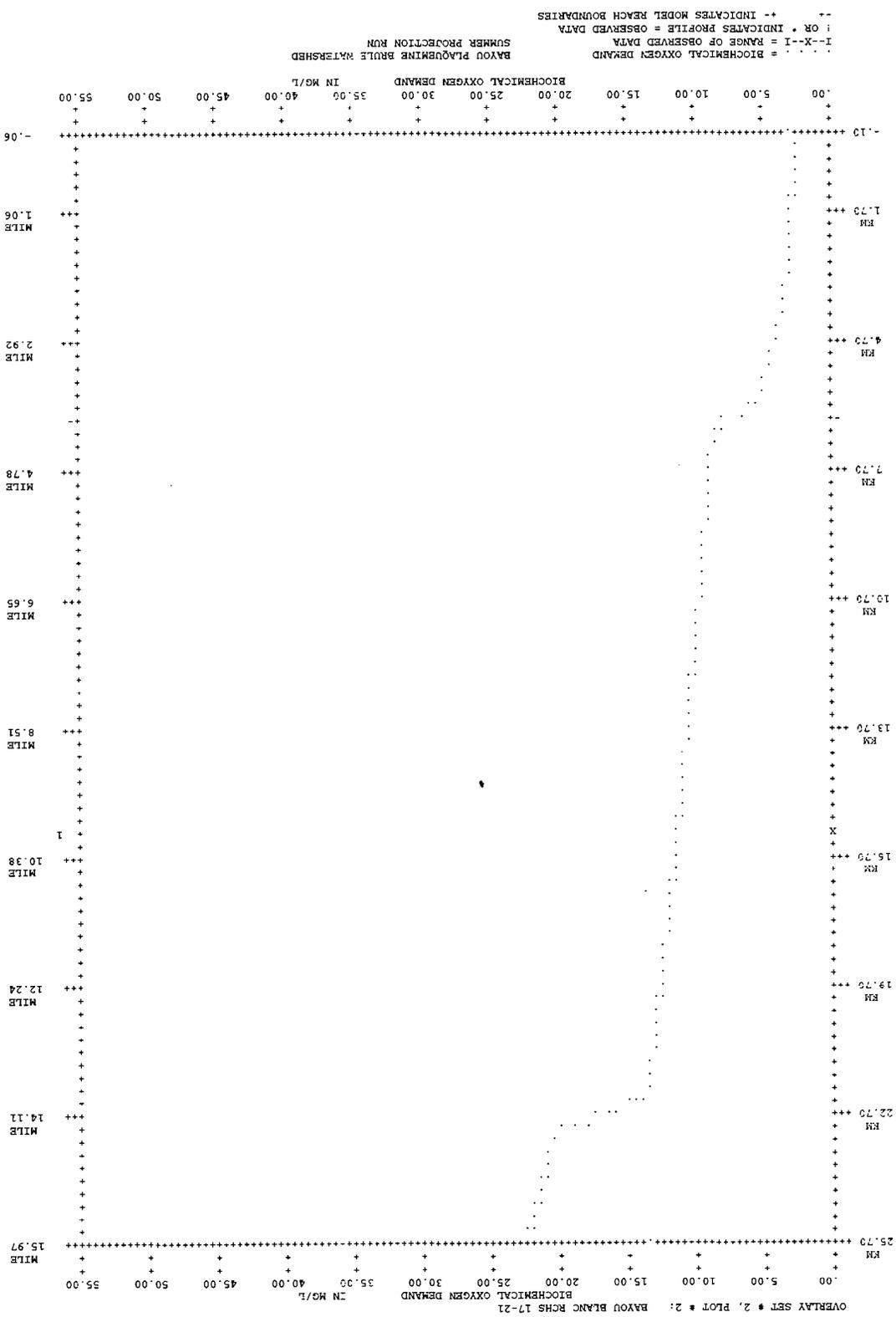
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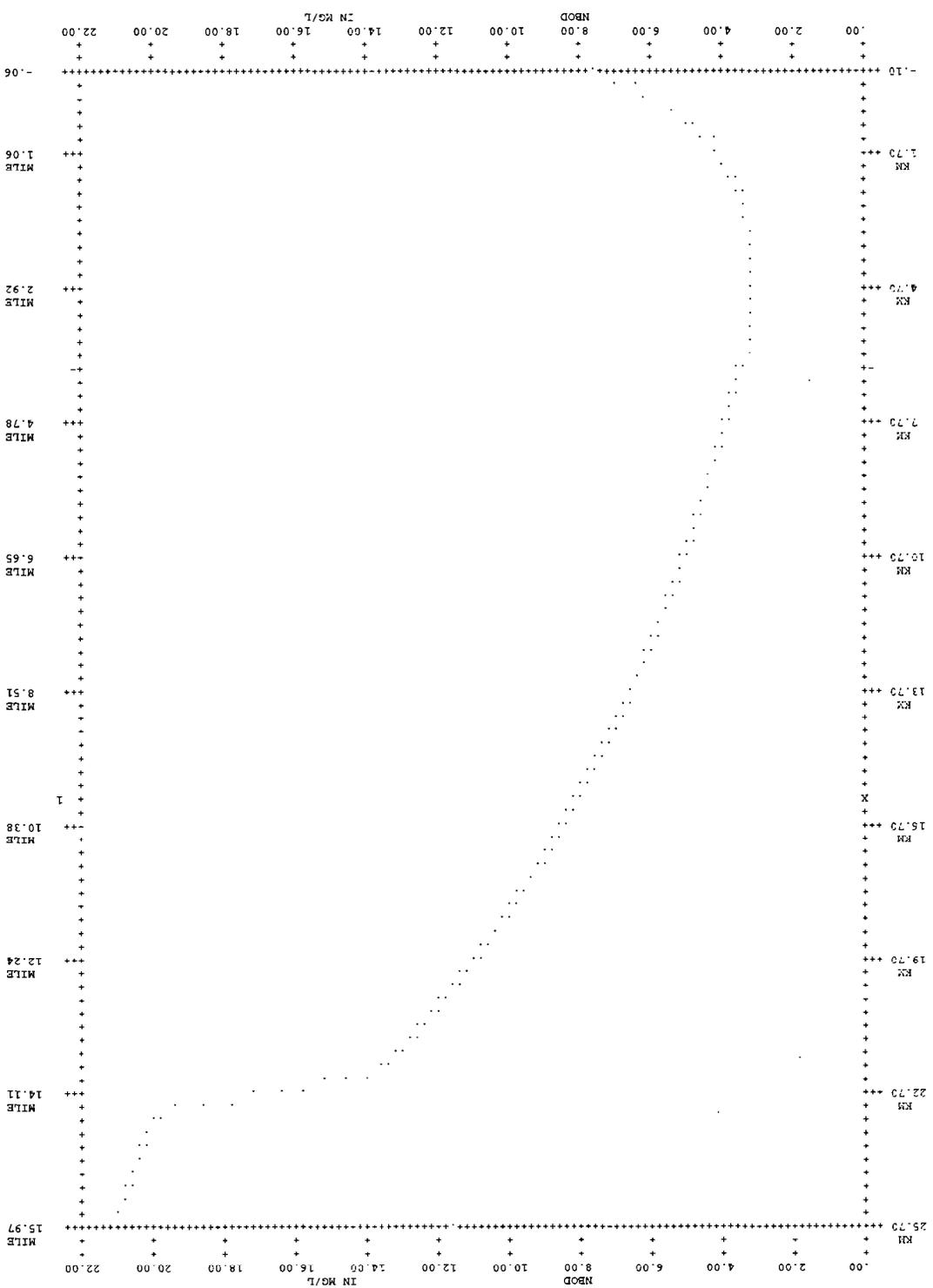
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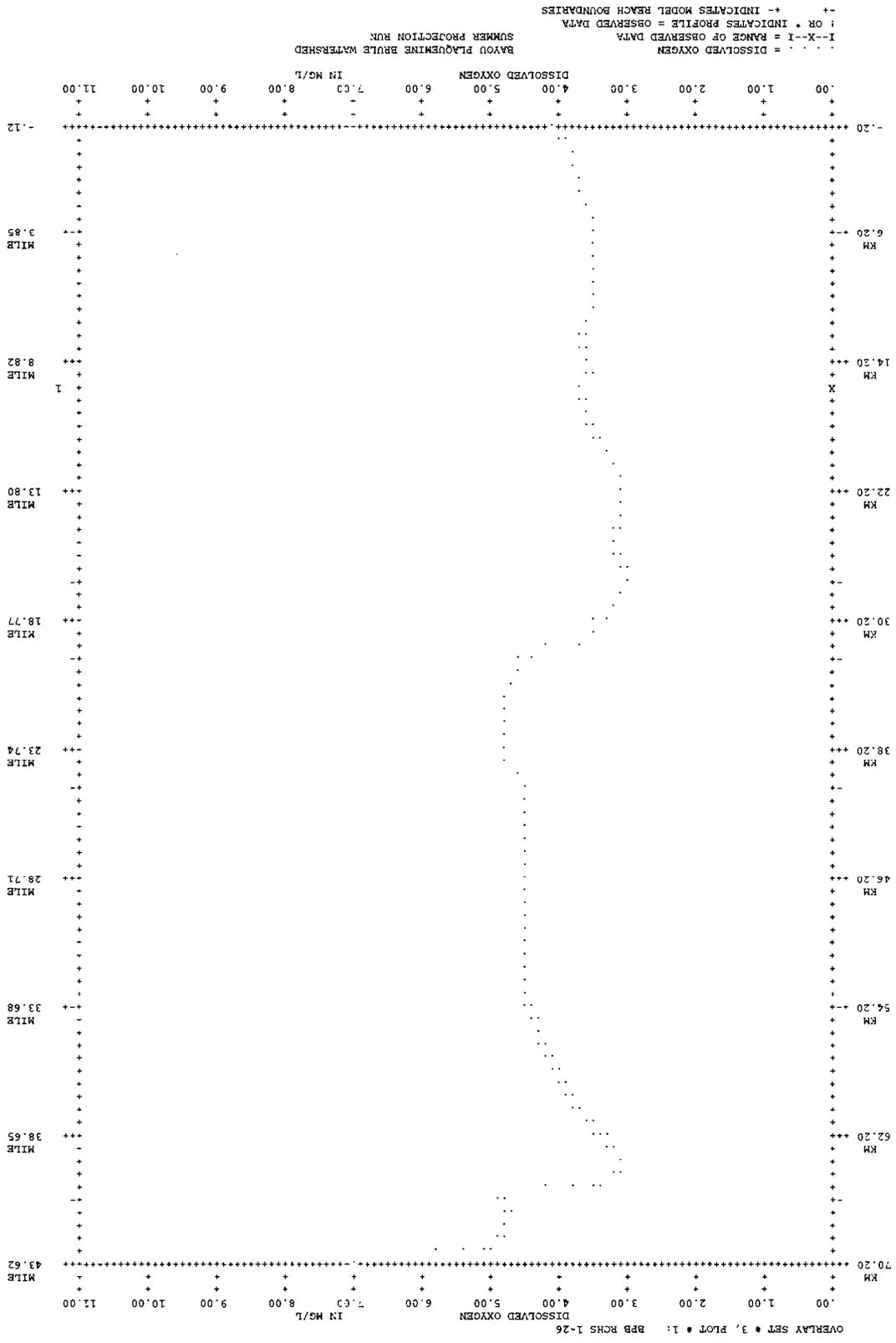
OVERLAY SET # 2, PLOT # 3: BAYOU BLANC RCHS 17-21



RAYOU PROJECTION BRULE WATERSHED
SUMMER PROJECTION RUN
I-X-I = RANGE OF OBSERVED DATA
OR = INDICATES PROFILE = OBSERVED DATA
+ = INDICATES MODEL REACH BOUNDARIES

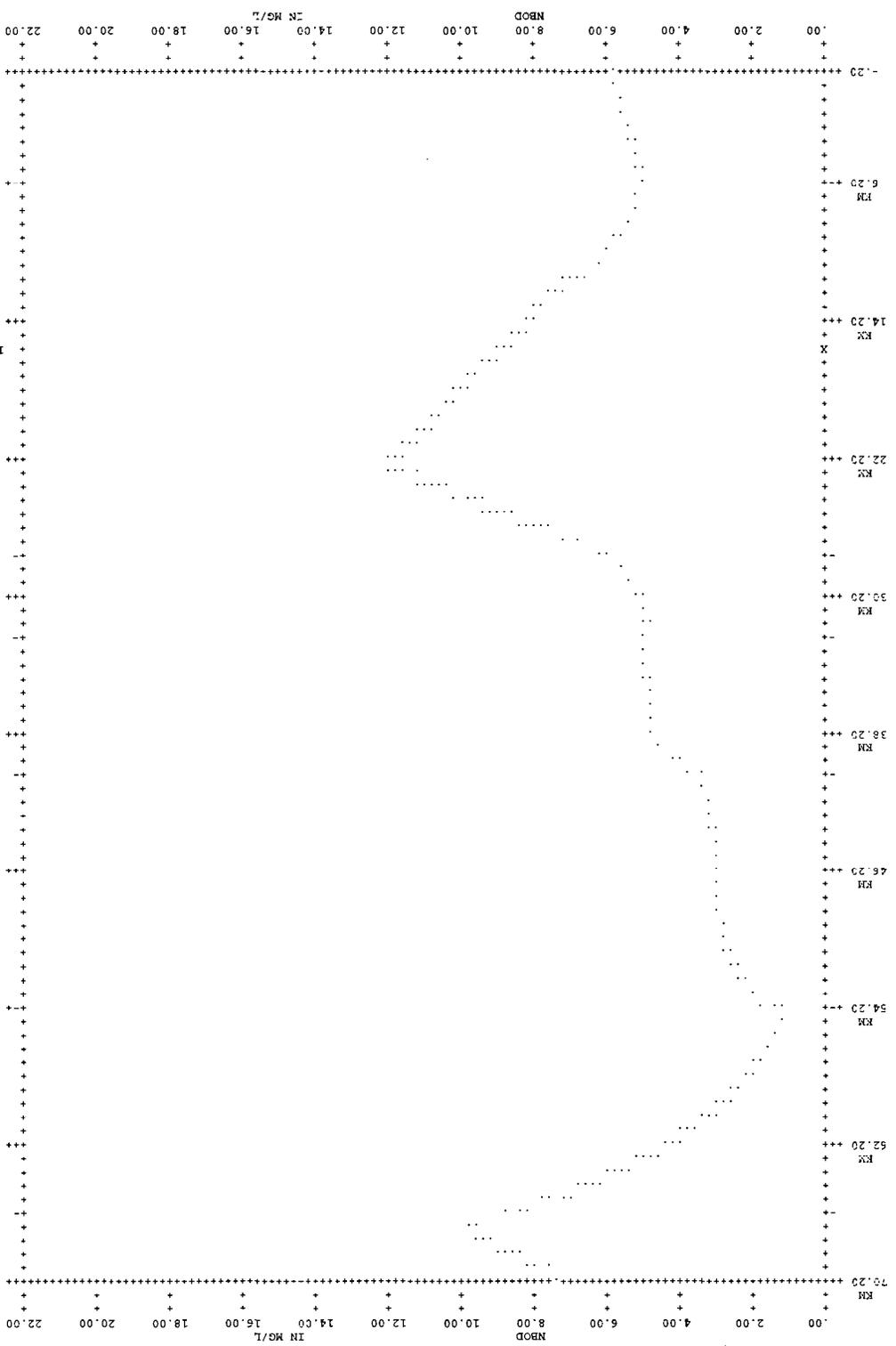
mg/L
MILES

MILES

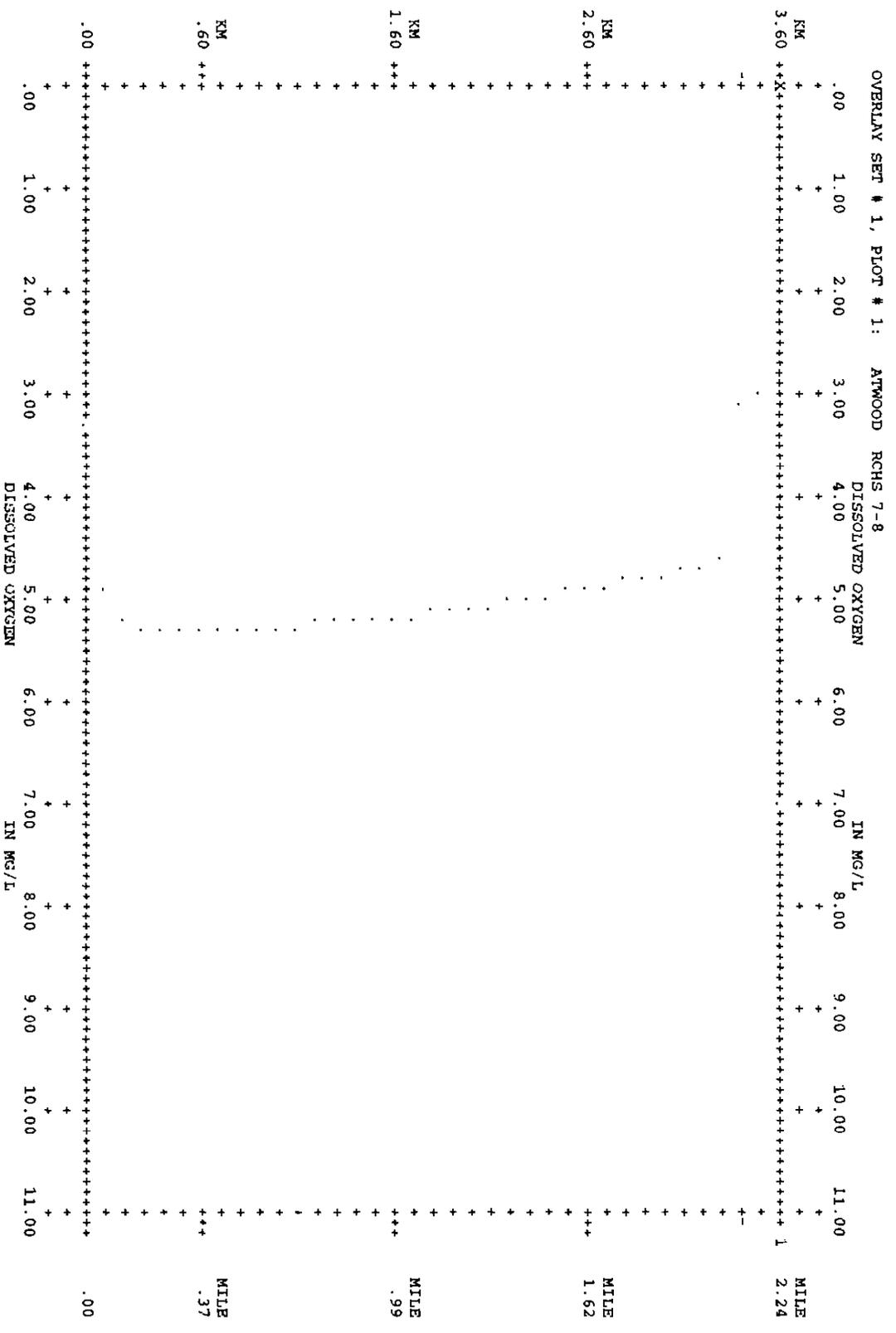


OVERLAY SET # 3, PLOT # 3: BPP RCHS 1-26
NPOD

IN MG/L



IN MG/L



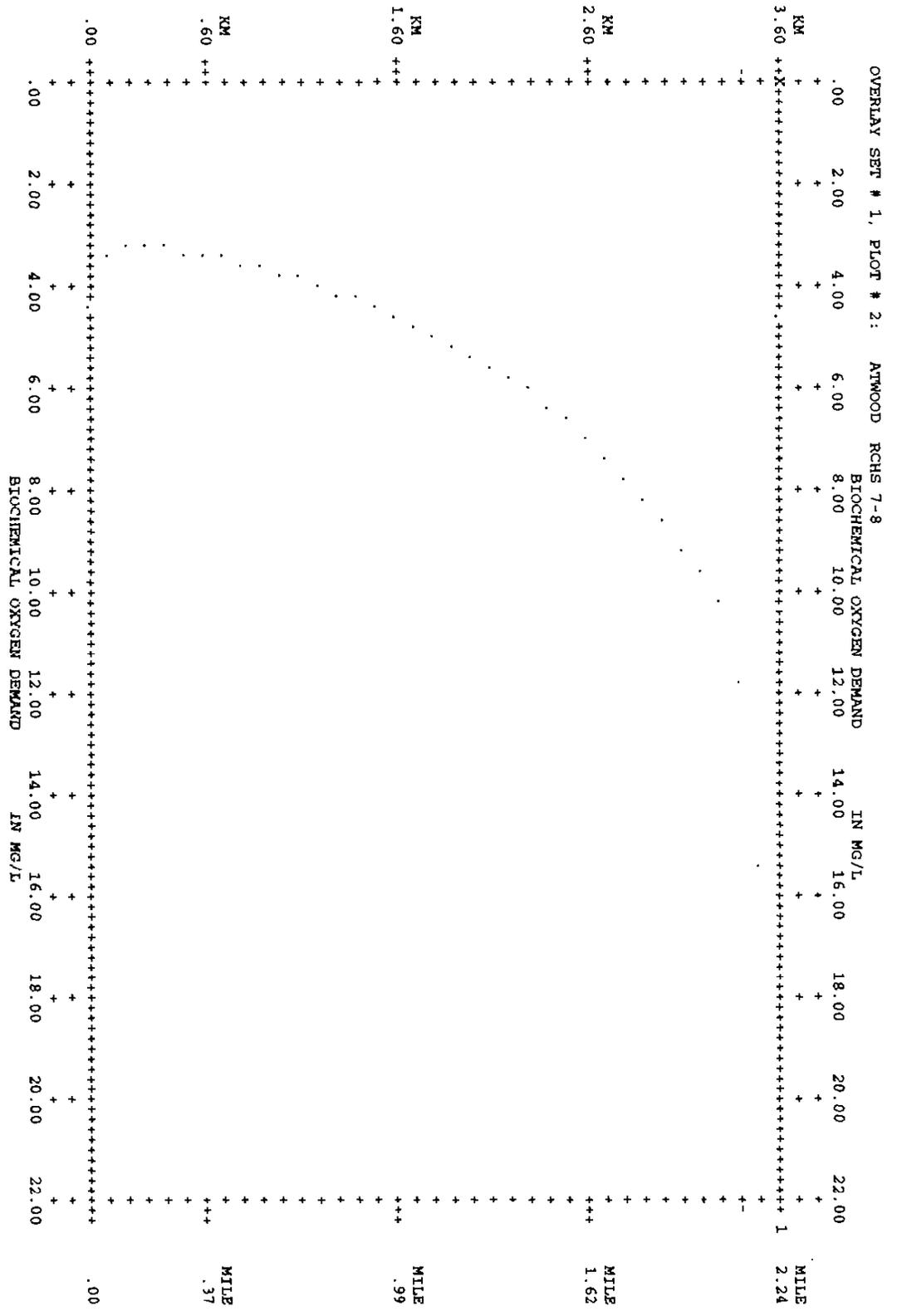
OVERLAY SET # 1, PLOT # 1: ATWOOD RCHS 7-8
 DISSOLVED OXYGEN
 IN MG/L

..... = DISSOLVED OXYGEN
 I-X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRUILE WATERSHED
 SUMMER PROJECTION RUN

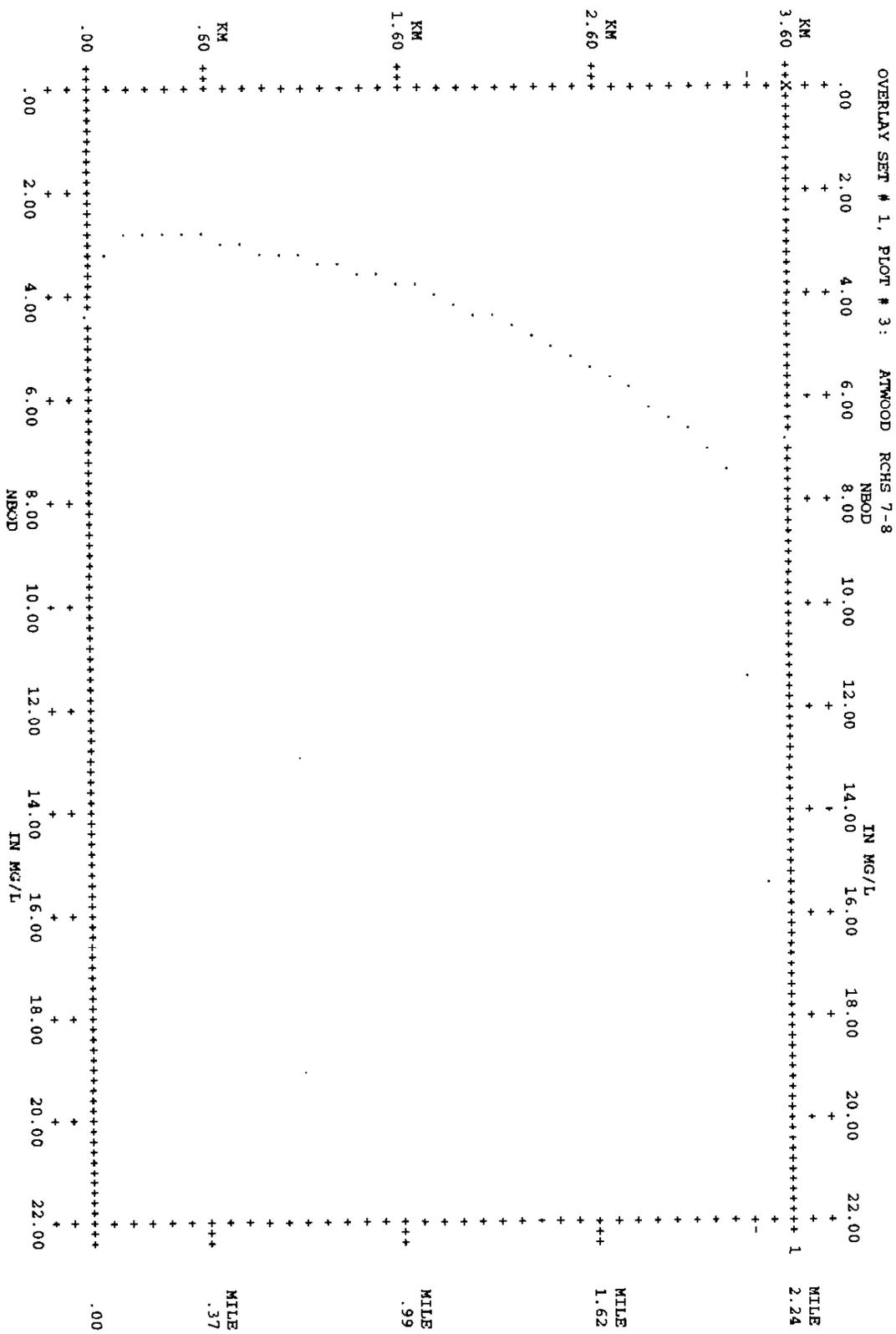
KM
 1.60 +++
 KM
 .60 +++
 KM
 2.60 +++
 KM
 3.60 +++

MILE
 2.24
 MILE
 1.62
 MILE
 .99
 MILE
 .37

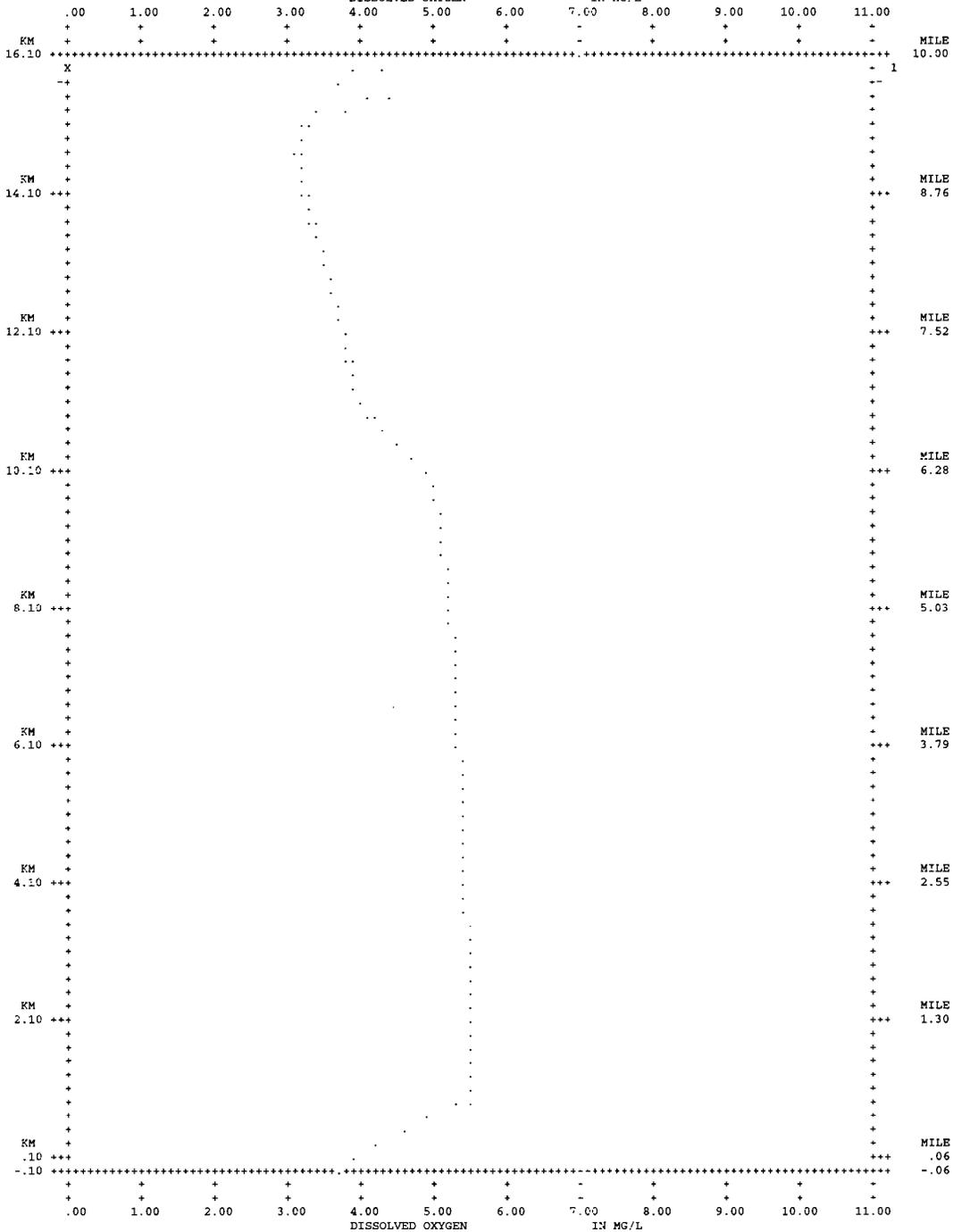


. . . . = BIOCHEMICAL OXYGEN DEMAND
 I-X-I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN



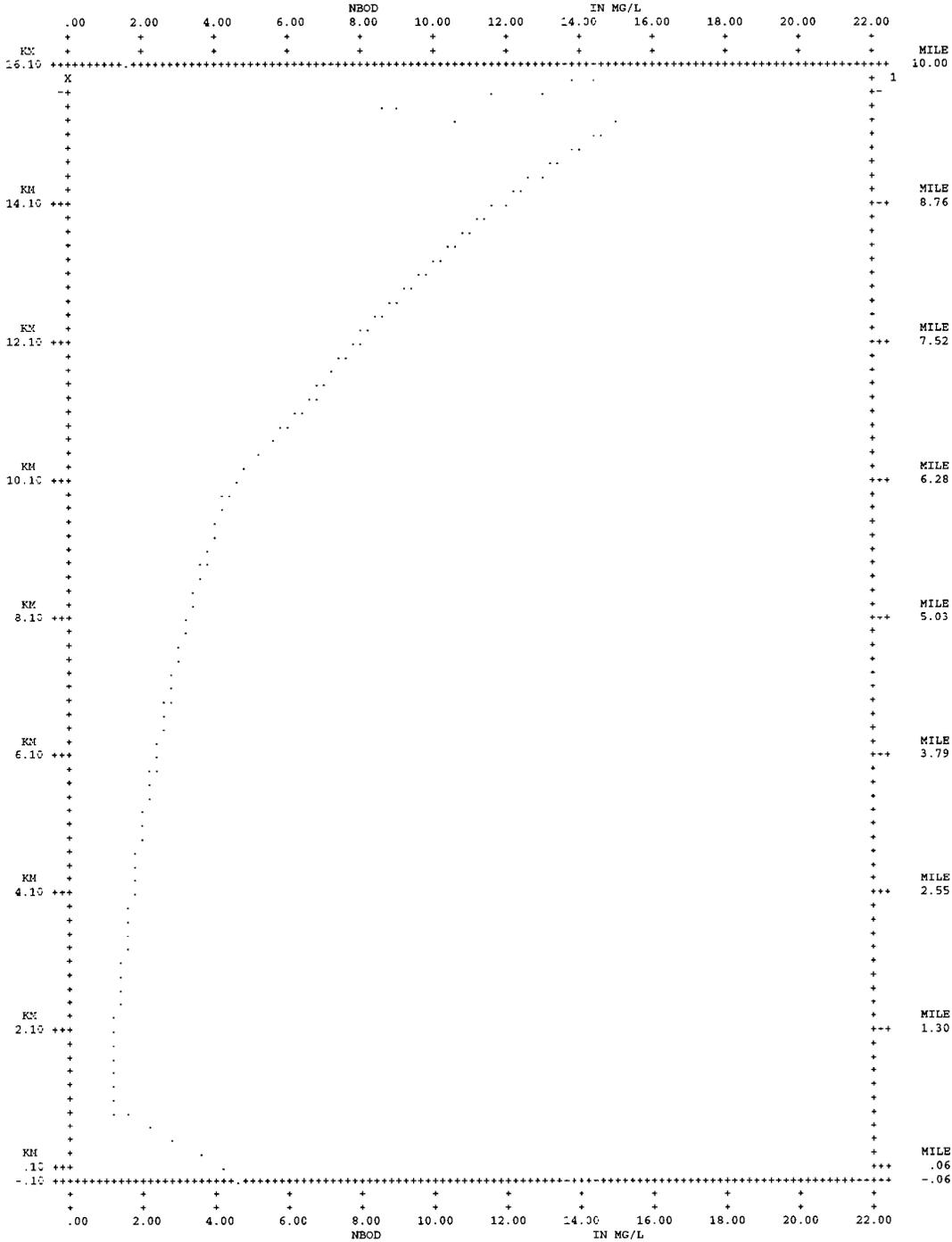
OVERLAY SET # 2, PLOT # 1: SILLS/WIKOFF RCHS 10-12
DISSOLVED OXYGEN IN MG/L



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

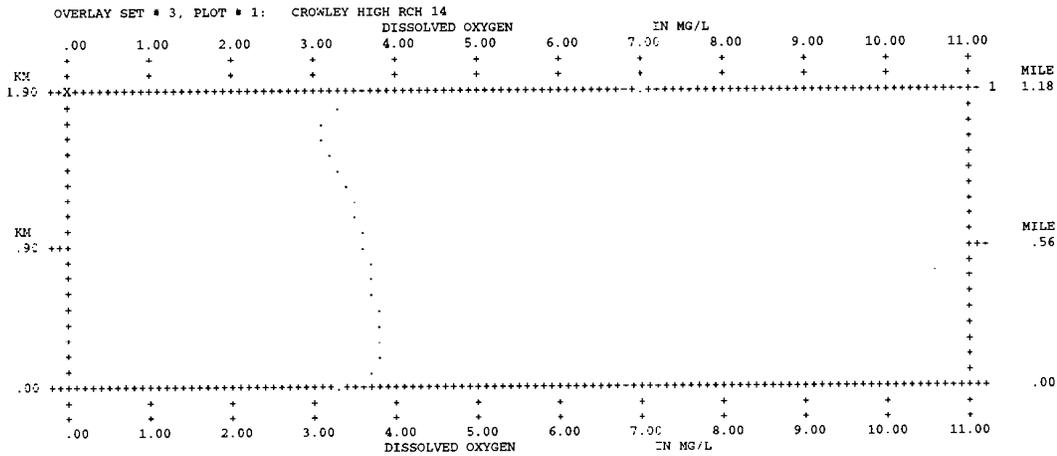
OVERLAY SET # 2, PLOT # 3: SILLS/WIROFF RCHS 10-12



. . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

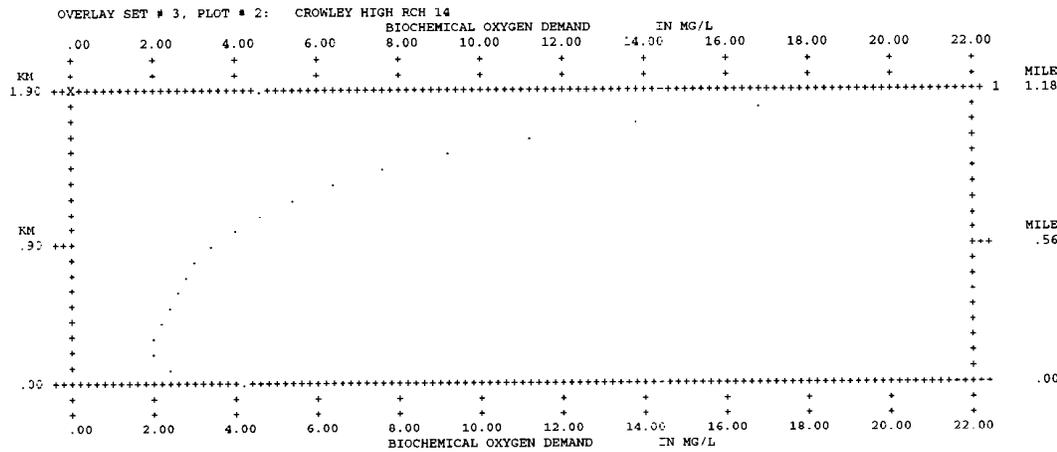
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..... = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

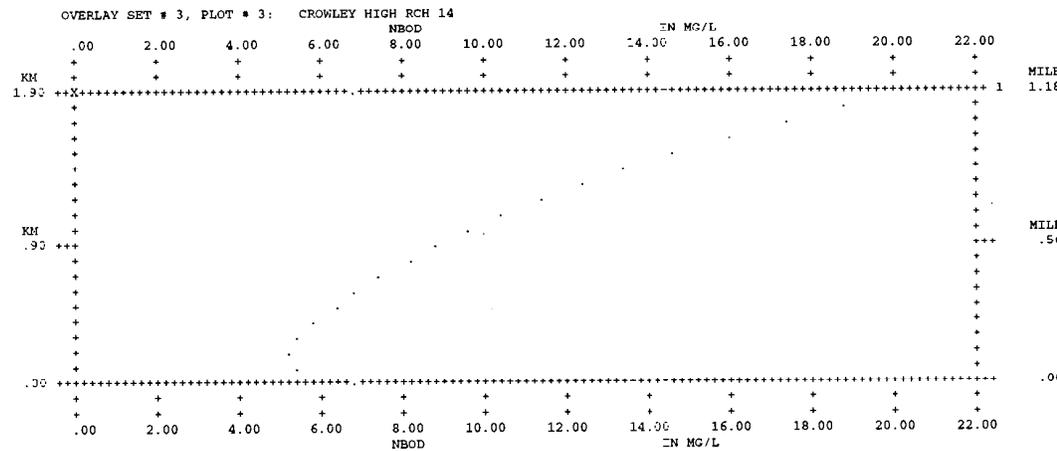
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..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

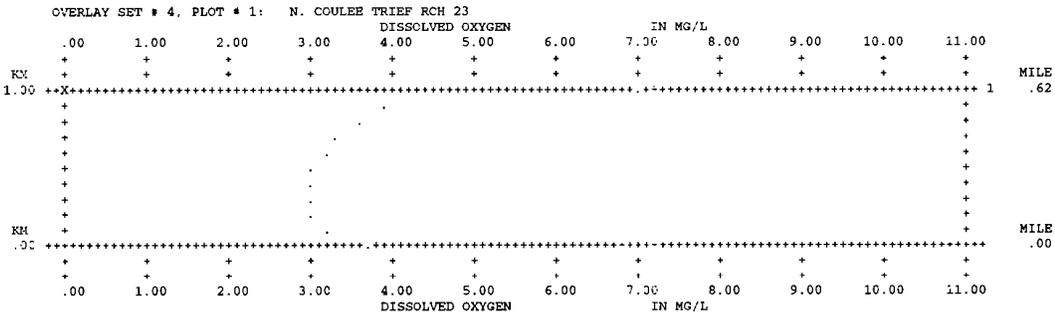
1



..... = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

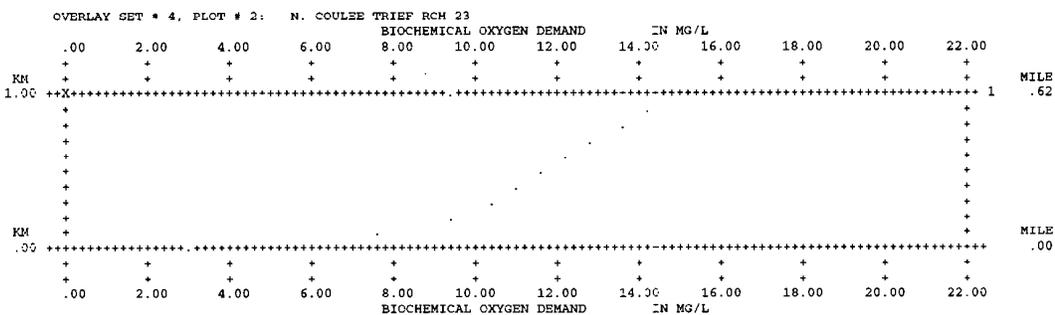
1



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

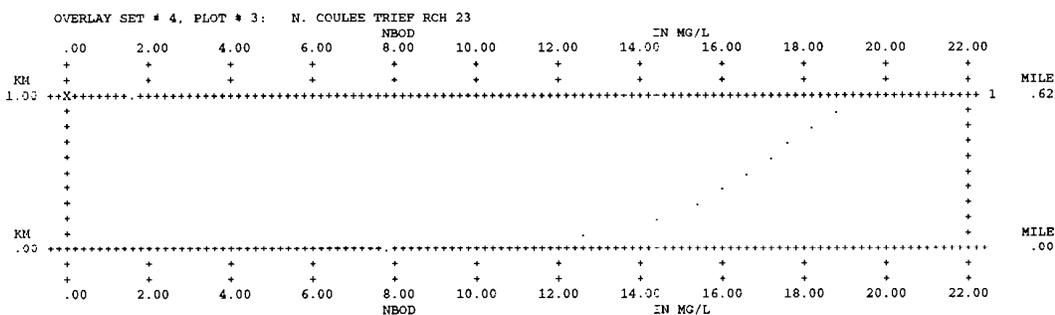
1



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

1



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

APPENDIX D2 – WATER QUALITY WINTER PROJECTION OUTPUT AND CHARTS

Model Output:

WPRJA3TX.doc - Word file from which the Qual-Txn text output file was printed

WPRJB3PL.doc - Word file from which 9 plots were printed

BPB @ Church Pt Rch 1-3

Bayou Blanc Rchs 17-21

BPB Rchs 1-26

WPRJA3PL.doc - Word file from which 12 plots were printed

Atwood Rchs 7-8

Sills/Wikoff Rchs 10-12

Crowley High Rch 14

N. Coulee Trief Rch 23

Output produced at 10:03 hours on 03/18/1999

\$\$\$ DATA TYPE 1 (TITLES AND CONTROL CARDS) \$\$\$

CARD TYPE	CONTROL TITLES
CNTROL01	BAYOU PLAQUEMINE BRULE WATERSHED
CNTROL02	WINTER PROJECTION RUN
CNTROL03	FCHO DATA INPUT
CNTROL04	INTERMEDIATE SUMMARY
CNTROL05	CAPSULE SUMMARY
CNTROL06	FINAL REPORT
CNTROL07	LOADING SUMMARY
CNTROL08	SPECIAL REPORT
CNTROL09	LINE PRINTER PLOT
CNTROL10	GRAPHICS CAPABILITY
CNTROL11	SEQUENCING OUTPUT
CNTROL12	METRIC UNITS
CNTROL13	OXYGEN DEPENDENT RATES
CNTROL14	SENSITIVITY ANALYSIS
CNTROL15	OVERLAY PLOT
ENDATA01	

\$\$\$ DATA TYPE 2 (MODEL OPTIONS) \$\$\$

CARD TYPE	MODEL OPTION	
MODOPT01	TEMPERATURE	
MODOPT02	SALINITY	
MODOPT03	CONSERVATIVE MATERIAL I = CHLORIDES	IN MG/L
MODOPT04	CONSERVATIVE MATERIAL II = SULFATES	IN MG/L
MODOPT05	DISSOLVED OXYGEN	
MODOPT06	BIOCHEMICAL OXYGEN DEMAND - UCBOD	
MODOPT07	NITROGEN	
MODOPT08	PHOSPHORUS	
MODOPT09	CHLOROPHYLL A	
MODOPT10	MACROPHYTES	
MODOPT11	COLIFORM	
MODOPT12	NONCONSERVATIVE MATERIAL = NBOD	IN MG/L
ENDATA02		

\$\$\$ DATA TYPE 3 (PROGRAM CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
PROGRAM	MAXIMUM ITERATION LIMIT	= 200.00000
PROGRAM	PLOT CONTROL VALUE	= 3.00000
PROGRAM	INTERMEDIATE REPORT TYPE	= 4.00000
PROGRAM	FINAL REPORT TYPE	= 1.00000
PROGRAM	BOD OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	NCM OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	INHIBITION CONTROL VALUE	= 2.00000
PROGRAM	TIDE HEIGHT (METERS)	= .07600
PROGRAM	DISPERSION EQUATION	= 1.00000
PROGRAM	ALGAE OXYGEN PROD	= .05000
PROGRAM	OCEAN EXCHANGE RATIO	= 1.00000

ENDATA03

\$\$\$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) \$\$\$

CARD TYPE	RATE CODE	THETA VALUE
TEMP	BENTHAL	1.06500
TEMP	BOD SETT	1.00000
TEMP	NCM DECA	1.07000
TEMP	NCM SETT	1.00000

ENDATA04

\$\$\$ CONSTANTS TYPE 5 (TEMPERATURE DATA) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA05		

\$\$\$ DATA TYPE 6 (ALGAE CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA06		

\$\$\$ DATA TYPE 7 (MACROPHYTE CONSTANTS) \$\$\$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
ENDATA07		

\$\$\$ DATA TYPE 8 (REACH IDENTIFICATION DATA) \$\$\$

CARD TYPE	REACH ID	NAME	BEGIN REACH KM	END REACH KM	ELEM LENGTH KM	REACH LENGTH KM	ELEMS PER REACH	BEGIN ELEM NUM	END ELEM NUM
REACH ID	1	PB FREE FLOWING W/CHURCH POINT	70.20	TO	20.00	4.00	20	1	20
REACH ID	2	PB POOLED REACH RIFOW CHURCH POINT	66.20	TO	20.00	.20	1	21	21
REACH ID	3	PB POOLED REACH TO HAZELWOOD GULLY	66.00	TO	20.00	11.80	59	22	80
REACH ID	4	PB HAZELWOOD GULLY TO COLES GULLY	54.20	TO	1.0000	14.00	14	81	94
REACH ID	5	PB COLES GULLY TO LONGPOINT GULLY	40.20	TO	1.0000	8.00	8	95	102
REACH ID	6	PB LONGPOINT GULLY TO ATWOOD BAYOU	32.20	TO	4.000	.80	2	103	104
REACH ID	7	AG ATWOOD GULLY	3.60	TO	1.000	.20	2	105	106
REACH ID	8	AB ATWOOD BAYOU TO BPB	3.40	TO	1.000	3.40	34	107	140
REACH ID	9	PB ATWOOD BAYOU TO BAYOU WIKOFF	31.40	TO	5.500	1.10	2	141	142
REACH ID	10	SG SILLS GULLY	16.10	TO	1.000	.40	4	143	146
REACH ID	11	SB SILLS BAYOU	15.70	TO	1.000	4.70	47	147	193
REACH ID	12	BW BAYOU WIKOFF TO BPB	11.00	TO	1.0000	11.00	11	194	204
REACH ID	13	PB BAYOU WIKOFF TO CROWLEY HIGH G.	30.30	TO	8.000	3.20	4	205	208
REACH ID	14	CG CROWLEY HIGH TO BPB	1.90	TO	1.000	1.90	19	209	227
REACH ID	15	PB CROWLEY HIGH GULLY TO ROLLER C.	27.10	TO	2.000	5.40	27	228	254
REACH ID	16	PB ROLLER CANAL TO BAYOU BLANC	21.70	TO	2.000	6.40	32	255	286
REACH ID	17	BB RAYNE POTW TO LAKE	25.70	TO	1.000	2.50	25	287	311
REACH ID	18	BB LAKE	23.20	TO	1.000	.40	4	312	315
REACH ID	19	BB LAKE	22.80	TO	1.000	.50	5	316	320
REACH ID	20	BB LAKE TO RK 6.4	22.30	TO	3.000	15.90	53	321	373
REACH ID	21	BB RK 6.4 TO BPB	6.40	TO	4.000	6.40	16	374	389
REACH ID	22	PB BAYOU BLANC TO N. COULEE TRIEF	15.30	TO	1.000	.50	5	390	394
REACH ID	23	CT ESTHERWOOD TO BPB	1.00	TO	1.000	1.00	10	395	404
REACH ID	24	PB BELOW N. COULEE TRIEF	14.80	TO	1.000	2.80	28	405	432
REACH ID	25	PB ABOVE BAYOU JONAS	12.00	TO	1.0000	6.00	6	433	438
REACH ID	26	PB BAYOU JONAS TO BAYOU DES CANNES	6.00	TO	1.0000	6.00	6	439	444

ENDATA08

\$\$\$ DATA TYPE 9 (ADVECTIVE HYDRAULIC COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	VELOCITY "A"	VELOCITY "B"	DEPTH "C"	DEPTH "D"	DEPTH "E"	MANNINGS "N"
HYDR-1	1	.06390000	.340	.560	.360	.150	10.000
HYDR-1	2	.30800000	1.000	.000	.360	.440	.000
HYDR-1	3	.30800000	1.000	.000	.360	.440	.000
HYDR-1	4	.09690000	1.000	.000	.450	.860	.000
HYDR-1	5	.01670000	1.000	.000	.450	2.070	.000
HYDR-1	6	.01560000	1.000	.000	.450	2.140	.000
HYDR-1	7	.01010000	.340	.830	.360	.150	10.000
HYDR-1	8	.02650000	.340	.550	.360	.150	10.000
HYDR-1	9	.02070000	1.000	.000	.450	1.860	.000
HYDR-1	10	.06490000	.340	.400	.360	.150	10.000
HYDR-1	11	.08010000	.340	.380	.360	.150	10.000
HYDR-1	12	.12430000	.430	.220	.450	.210	10.000
HYDR-1	13	.01140000	1.000	.000	.450	2.500	.000
HYDR-1	14	.01720000	.340	.710	.360	.150	10.000
HYDR-1	15	.01030000	1.000	.000	.450	2.830	.000

HYDR-1	16	PB	.00870000	1.000	.000	.450	2.850	.000
HYDR-1	17	BB	.25330000	.340	.140	.360	.150	10.000
HYDR-1	18	BB	.08500000	1.000	.000	.450	.300	10.000
HYDR-1	19	BB	.08500000	1.000	.000	.450	.300	10.000
HYDR-1	20	BB	.08110000	.340	.800	.360	.150	10.000
HYDR-1	21	BB	.03500000	1.000	.000	.450	1.430	.000
HYDR-1	22	PB	.00560000	1.000	.000	.450	3.570	.000
HYDR-1	23	CT	.06300000	.340	.380	.360	.150	10.000
HYDR-1	24	PB	.00610000	1.000	.000	.450	3.430	.000
HYDR-1	25	PB	.00350000	1.000	.000	.450	4.500	.000
HYDR-1	26	PB	.00520000	1.000	.000	.450	3.710	.000

ENDATA09

\$\$\$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) \$\$\$

CARD TYPE	REACH ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR-2	2	PB	.000	.000	.000	.000
HYDR-2	3	PB	1.900	.000	.000	.000
HYDR-2	4	PB	4.000	.000	.000	.000
HYDR-2	5	PB	5.300	.000	.000	.000
HYDR-2	6	PB	5.400	.000	.000	.000
HYDR-2	9	PB	5.600	.000	.000	.000
HYDR-2	13	PB	6.000	.000	.000	.000
HYDR-2	15	PB	6.900	.000	.000	.000
HYDR-2	16	PB	7.900	.000	.000	.000
HYDR-2	21	BB	8.000	.000	.000	.000
HYDR-2	22	PB	8.000	.000	.000	.000
HYDR-2	24	PB	8.400	.000	.000	.000
HYDR-2	25	PB	9.300	.000	.000	.000
HYDR-2	26	PB	10.200	.000	.000	.000

ENDATA10

\$\$\$ DATA TYPE 11 (INITIAL CONDITIONS) \$\$\$

CARD TYPE	REACH	ID	THMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	PB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	2	PB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	3	PB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	4	PB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	5	PB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	6	PB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	7	AG	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	8	AP	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	9	PB	15.70	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	10	SG	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	11	SB	15.70	.14	3.00	1.00	1.00	1.00	.00	.00
INITIAL	12	BW	15.70	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	13	PB	15.70	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	14	CG	15.70	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	15	PB	15.70	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	16	PB	15.70	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	17	BB	15.70	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	18	BB	15.70	.12	3.00	1.00	1.00	1.00	.00	.00
INITIAL	19	BB	15.70	.12	3.00	1.00	1.00	1.00	.00	.00
INITIAL	20	BB	15.70	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	21	BB	15.70	.13	3.00	1.00	1.00	1.00	.00	.00
INITIAL	22	PB	15.70	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	23	CT	15.70	.11	3.00	1.00	1.00	1.00	.00	.00
INITIAL	24	PB	15.70	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	25	PB	15.70	.10	3.00	1.00	1.00	1.00	.00	.00
INITIAL	26	PB	15.70	.10	3.00	1.00	1.00	1.00	.00	.00

ENDATA11

\$\$\$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, ROD COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AEROB BOD DECAY	BOD SETT	BOD CONV TO SOD	ANAER BOD DECAY
COEF-1	1	PB	1.	2.410	.000	.000	1.000	.130	.016	.000	.000
COEF-1	2	PR	1.	1.730	.000	.000	1.400	.130	.044	.000	.000
COEF-1	3	PB	1.	1.730	.000	.000	1.400	.130	.044	.000	.000
COEF-1	4	PI	1.	.820	.000	.000	1.000	.130	.086	.000	.000
COEF-1	5	PB	1.	.330	.000	.000	.500	.130	.207	.000	.000
COEF-1	6	PB	1.	.320	.000	.000	.500	.130	.161	.000	.000
COEF-1	7	AG	1.	2.680	.000	.000	1.600	.130	.053	.000	.000
COEF-1	8	AB	1.	2.260	.000	.000	1.000	.130	.028	.000	.000
COEF-1	9	PB	1.	.370	.000	.000	.500	.120	.140	.000	.000
COEF-1	10	SG	1.	2.890	.000	.000	1.600	.130	.060	.000	.000
COEF-1	11	SB	1.	2.750	.000	.000	1.600	.130	.063	.000	.000
COEF-1	12	BW	1.	3.060	.000	.000	1.100	.130	.040	.000	.000
COEF-1	13	PB	1.	.270	.000	.000	.500	.120	.188	.000	.000
COEF-1	14	CG	1.	3.060	.000	.000	1.700	.130	.055	.000	.000
COEF-1	15	PB	1.	.240	.000	.000	.000	.120	.142	.000	.000
COEF-1	16	PB	1.	.240	.000	.000	.000	.120	.143	.000	.000

COEF-1	17	BB	1.	5.710	.000	.000	.000	1.800	.050	.054	.000	.000
COEF-1	18	BB	1.	2.350	.000	.000	.000	1.000	.090	.049	.000	.000
COEF-1	19	BB	1.	2.350	.000	.000	.000	1.000	.090	.049	.000	.000
COEF-1	20	BB	1.	1.630	.000	.000	.000	1.000	.060	.000	.000	.000
COEF-1	21	BB	1.	.480	.000	.000	.000	1.000	.090	.000	.000	.000
COEF-1	22	BB	1.	.190	.000	.000	.000	1.700	.120	.179	.000	.000
COEF-1	23	CT	1.	2.880	.000	.000	.000	1.000	.130	.058	.000	.000
COEF-1	24	BB	1.	.200	.000	.000	.000	.000	.120	.172	.000	.000
COEF-1	25	BB	1.	.150	.000	.000	.000	.000	.120	.225	.000	.000
COEF-1	26	BB	1.	.180	.000	.000	.000	.000	.120	.186	.000	.000

ENDATA12

\$\$\$ DATA TYPE 13 (NITROGEN AND PHOSPHORUS COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	ORG-N DECA	ORG-N SETT	ALGAF: CHL A	ALGAE SETT	ALGAE TO NH3	ORGI TO NH3	CONV SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE	MACRO GROW	MACRO RESP
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ENDATA13

\$\$\$ DATA TYPE 14 (ALGAE AND MACROPHYTE COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	SECCHI DEPTH	ALGAF: CHL A	ALGAE SETT	ALGAE TO SOD	ALG CONV TO SOD	ALGAE GROW	ALGAF: RESP	MACRO GROW	MACRO RESP
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ENDATA14

\$\$\$ DATA TYPE 15 (COLIFORM AND NONCONSERVATIVE COEFFICIENTS) \$\$\$

CARD TYPE	REACH	ID	COLIFORM DIE-OFF	NCM DECAY	NCM SETT	NCM CONV TO SOD
COEF-4	1	PB	.00	.10	.02	.00
COEF-4	2	PB	.00	.10	.04	.00
COEF-4	3	PB	.00	.10	.04	.00
COEF-4	4	PB	.00	.10	.09	.00
COEF-4	5	PB	.00	.00	.21	.00
COEF-4	6	PB	.00	.08	.16	.00
COEF-4	7	AG	.00	.13	.05	.00
COEF-4	8	BB	.00	.13	.03	.00
COEF-4	9	PB	.00	.06	.14	.00
COEF-4	10	SG	.00	.13	.06	.00
COEF-4	11	SB	.00	.13	.06	.00
COEF-4	12	BW	.00	.13	.04	.00
COEF-4	13	PB	.00	.05	.13	.00
COEF-4	14	CG	.00	.05	.05	.00
COEF-4	15	PB	.00	.03	.00	.00
COEF-4	16	PB	.00	.03	.00	.00
COEF-4	17	BB	.00	.10	.03	.00
COEF-4	18	BB	.00	.14	.03	.00

COEF-4 19 BB .00 .14 .03 .00
 COEF-4 20 BB .00 .15 .00 .00
 COEF-4 21 BB .00 .15 .00 .00
 COEF-4 22 PB .00 .03 .00 .00
 COEF-4 23 CT .00 .13 .06 .00
 COEF-4 24 PB .00 .03 .00 .00
 COEF-4 25 PB .00 .03 .00 .00
 COEF-4 26 PB .00 .03 .00 .00
 ENDATA15

\$\$\$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) \$\$\$

CARD TYPE	REACH	ID	OUTFLOW	INFLOW	TEMP	SALIN	CM-I	CM-II	INFLOW/DIST
INCR-1	1	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	2	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	3	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	4	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	5	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	6	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	7	AG	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	8	AB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	9	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	10	SG	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	11	SB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	12	BW	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	13	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	14	CG	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	15	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	16	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	17	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	18	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	19	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	20	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	21	BB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	22	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	23	CT	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	24	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	25	PB	.00000	.00000	.00	.00	.00	.00	.00000
INCR-1	26	PB	.00000	.00000	.00	.00	.00	.00	.00000

\$\$\$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	REACH	ID	DO	BOD	ORG-N	NH3	NO3+2
INCR-2	1	PB	.00	.00	.00	.00	.00
INCR-2	2	PB	.00	.00	.00	.00	.00
INCR-2	3	PB	.00	.00	.00	.00	.00
INCR-2	4	PB	.00	.00	.00	.00	.00
INCR-2	5	PB	.00	.00	.00	.00	.00

INCR-2	6	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	7	AG	.00	.00	.00	.00	.00	.00	.00
INCR-2	8	AB	.00	.00	.00	.00	.00	.00	.00
INCR-2	9	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	10	SG	.00	.00	.00	.00	.00	.00	.00
INCR-2	11	SB	.00	.00	.00	.00	.00	.00	.00
INCR-2	12	BW	.00	.00	.00	.00	.00	.00	.00
INCR-2	13	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	14	CG	.00	.00	.00	.00	.00	.00	.00
INCR-2	15	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	16	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	17	BB	.00	.00	.00	.00	.00	.00	.00
INCR-2	18	BB	.00	.00	.00	.00	.00	.00	.00
INCR-2	19	BB	.00	.00	.00	.00	.00	.00	.00
INCR-2	20	BB	.00	.00	.00	.00	.00	.00	.00
INCR-2	21	BB	.00	.00	.00	.00	.00	.00	.00
INCR-2	22	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	23	CT	.00	.00	.00	.00	.00	.00	.00
INCR-2	24	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	25	PB	.00	.00	.00	.00	.00	.00	.00
INCR-2	26	PB	.00	.00	.00	.00	.00	.00	.00

ENDATA17

\$\$\$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	REACH	ID	PHOS	CHL A	COLI	ICM
INCR-3	1	PB	.00	.00	.00	.00
INCR-3	2	PB	.00	.00	.00	.00
INCR-3	3	PB	.00	.00	.00	.00
INCR-3	4	PB	.00	.00	.00	.00
INCR-3	5	PB	.00	.00	.00	.00
INCR-3	6	PB	.00	.00	.00	.00
INCR-3	7	AG	.00	.00	.00	.00
INCR-3	8	AB	.00	.00	.00	.00
INCR-3	9	PB	.00	.00	.00	.00
INCR-3	10	SG	.00	.00	.00	.00
INCR-3	11	SB	.00	.00	.00	.00
INCR-3	12	BW	.00	.00	.00	.00
INCR-3	13	PB	.00	.00	.00	.00
INCR-3	14	CG	.00	.00	.00	.00
INCR-3	15	PB	.00	.00	.00	.00
INCR-3	16	PB	.00	.00	.00	.00
INCR-3	17	BB	.00	.00	.00	.00
INCR-3	18	BB	.00	.00	.00	.00
INCR-3	19	BB	.00	.00	.00	.00
INCR-3	20	BB	.00	.00	.00	.00
INCR-3	21	BB	.00	.00	.00	.00
INCR-3	22	PB	.00	.00	.00	.00
INCR-3	23	CT	.00	.00	.00	.00
INCR-3	24	PB	.00	.00	.00	.00
INCR-3	25	PB	.00	.00	.00	.00
INCR-3	26	PB	.00	.00	.00	.00

ENDATA18

\$\$\$ DATA TYPE 19 (NONPOINT SOURCE DATA) \$\$\$

CARD TYPE	REACH	ID	BOD	ORG-N	COLI	NCM	DO
NONPOINT	1	PB	12.00	.00	.00	10.00	.00
NONPOINT	2	PB	.70	.00	.00	.00	.00
NONPOINT	3	PB	39.30	.00	.00	.00	.00
NONPOINT	4	PB	120.00	.00	.00	120.00	.00
NONPOINT	5	PB	500.00	.00	.00	500.00	.00
NONPOINT	6	PB	70.00	.00	.00	70.00	.00
NONPOINT	7	AG	.00	.00	.00	.00	.00
NONPOINT	8	AR	7.00	.00	.00	7.00	.00
NONPOINT	9	PB	70.00	.00	.00	70.00	.00
NONPOINT	10	SG	.00	.00	.00	.00	.00
NONPOINT	11	SB	.00	.00	.00	.00	.00
NONPOINT	12	BW	.00	.00	.00	.00	.00
NONPOINT	13	PB	300.00	.00	.00	300.00	.00
NONPOINT	14	CG	1.00	.00	.00	.00	.00
NONPOINT	15	PB	480.00	.00	.00	300.00	.00
NONPOINT	16	PB	565.00	.00	.00	355.00	.00
NONPOINT	17	BB	.00	.00	.00	.00	.00
NONPOINT	18	BB	.00	.00	.00	.00	.00
NONPOINT	19	BB	.00	.00	.00	.00	.00
NONPOINT	20	BB	.00	.00	.00	.00	.00
NONPOINT	21	BB	40.00	.00	.00	140.00	.00
NONPOINT	22	PB	55.00	.00	.00	70.00	.00
NONPOINT	23	CT	.00	.00	.00	.00	.00
NONPOINT	24	PB	270.00	.00	.00	270.00	.00
NONPOINT	25	PB	1000.00	.00	.00	300.00	.00
NONPOINT	26	PB	1000.00	.00	.00	300.00	.00

ENDATA19

\$\$\$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	B. PLAQUEMINE BRULE	0	.02832	.000	.000	.000	.000
HDWTR-1	105	ATWOOD GULLY	0	.00000	.000	.000	.000	.000
HDWTR-1	143	SILLS GULLY	0	.02832	.000	.000	.000	.000
HDWTR-1	209	CROWLEY HIGH GULLY	0	.00000	.000	.000	.000	.000
HDWTR-1	287	BAYOU BLANC	0	.02832	.000	.000	.000	.000
HDWTR-1	395	N. COULEE TRIEF	0	.02832	.000	.000	.000	.000

ENDATA20

\$\$\$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
HDWTR-2	1	B. PLAQUEMINE BRULE	8.90	9.65	.00	.00	.00
HDWTR-2	105	ATWOOD GULLY	8.90	4.63	.00	.00	.00
HDWTR-2	143	SILLS GULLY	8.90	9.49	.00	.00	.00
HDWTR-2	209	CROWLEY HIGH GULLY	8.90	4.63	.00	.00	.00
HDWTR-2	287	BAYOU BLANC	8.90	13.69	.00	.00	.00
HDWTR-2	395	N. COULEE TRIEF	8.90	9.49	.00	.00	.00

ENDATA21

\$\$\$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	HCN
HDWTR-3	1	B. PLAQUEMINE BRULE	.00	.00	.00	7.52
HDWTR-3	105	ATWOOD GULLY	.00	.00	.00	6.80
HDWTR-3	143	SILLS GULLY	.00	.00	.00	1.73
HDWTR-3	209	CROWLEY HIGH GULLY	.00	.00	.00	6.80
HDWTR-3	287	BAYOU BLANC	.00	.00	.00	11.77
HDWTR-3	395	N. COULEE TRIEF	.00	.00	.00	1.73

ENDATA22

\$\$\$ DATA TYPE 23 (JUNCTION DATA) \$\$\$

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	NAME
JUNCTION	141	104	ATWOOD BAYOU CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	205	142	BAYOU WTKOFF CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	228	208	CROWLY HIGH GULLY CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	390	286	BAYOU BLANC CONFLUENCE WITH BAYOU PLAQUEMINE BRULE
JUNCTION	405	394	N. COULEE TRIEF CONFLUENCE WITH BAYOU PLAQUEMINE BRULE

ENDATA23

\$\$\$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	FLOW	TEMP	SAL	CM-I	CM-II
WSTLD-1	18	CHURCH POINT POTW	.04380	.000	.000	.000	.000
WSTLD-1	80	HAZELWOOD GULLY	.02832	.000	.000	.000	.000
WSTLD-1	94	COLES GULLY	.02832	.000	.000	.000	.000
WSTLD-1	102	LONG POINT GULLY	.02832	.000	.000	.000	.000
WSTLD-1	105	ATWOOD ACRES	.00253	.000	.000	.000	.000
WSTLD-1	107	U. ATWOOD BAYOU	.02832	.000	.000	.000	.000
WSTLD-1	143	ACADIAN FINE FOODS	.00138	.000	.000	.000	.000
WSTLD-1	147	U. SILLS BAYOU	.02832	.000	.000	.000	.000
WSTLD-1	150	N. RAYNE POTW	.00189	.000	.000	.000	.000

WSTLD-1	194	U. BAYOU WIKOFF	.02832	.000	.000	.000	.000	.000	.000	.000	.000	.000
WSTLD-1	209	CROWLEY HIGH SCHOOL	.00131	.000	.000	.000	.000	.000	.000	.000	.000	.000
WSTLD-1	247	CROWLEY POTW	.13527	.000	.000	.000	.000	.000	.000	.000	.000	.000
WSTLD-1	287	RAYNE POTW	.08215	.000	.000	.000	.000	.000	.000	.000	.000	.000
WSTLD-1	395	ESTHERWOOD POTW	.00220	.000	.000	.000	.000	.000	.000	.000	.000	.000
WSTLD-1	438	BAYOU JONAS	.02832	.000	.000	.000	.000	.000	.000	.000	.000	.000

\$\$\$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) \$\$\$

CARD TYPE	ELEMENT	NAME	DO	BOD	BOD	RMVL	ORG-N	IH3	NITRIE	NO3+2
WSTLD-2	18	CHURCH POINT POTW	6.00	46.00	.00	.00	.00	.00	.00	.00
WSTLD-2	80	HAZELWOOD GULLY	8.90	4.60	.00	.00	.00	.00	.00	.00
WSTLD-2	94	COLES GULLY	8.90	4.60	.00	.00	.00	.00	.00	.00
WSTLD-2	102	LONG POINT GULLY	8.90	4.60	.00	.00	.00	.00	.00	.00
WSTLD-2	105	ATWOOD ACRES	6.00	69.00	.00	.00	.00	.00	.00	.00
WSTLD-2	107	U. ATWOOD BAYOU	8.90	9.50	.00	.00	.00	.00	.00	.00
WSTLD-2	143	ACADIAN FINE FOODS	2.00	69.00	.00	.00	.00	.00	.00	.00
WSTLD-2	147	U. SILLS BAYOU	8.90	9.50	.00	.00	.00	.00	.00	.00
WSTLD-2	150	N. RAYNE POTW	2.00	69.00	.00	.00	.00	.00	.00	.00
WSTLD-2	194	U. BAYOU WIKOFF	8.90	9.50	.00	.00	.00	.00	.00	.00
WSTLD-2	209	CROWLEY HIGH SCHOOL	6.00	69.00	.00	.00	.00	.00	.00	.00
WSTLD-2	247	CROWLEY POTW	2.00	23.00	.00	.00	.00	.00	.00	.00
WSTLD-2	287	RAYNE POTW	6.00	23.00	.00	.00	.00	.00	.00	.00
WSTLD-2	395	ESTHERWOOD POTW	2.00	69.00	.00	.00	.00	.00	.00	.00
WSTLD-2	438	BAYOU JONAS	8.90	4.60	.00	.00	.00	.00	.00	.00

ENDATA25

\$\$\$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) \$\$\$

CARD TYPE	ELEMENT	NAME	PHOS	CHL. A	COLI	FCM
WSTLD-3	18	CHURCH POINT POTW	.00	.30	.00	43.00
WSTLD-3	80	HAZELWOOD GULLY	.00	.00	.00	6.80
WSTLD-3	94	COLES GULLY	.00	.00	.00	6.80
WSTLD-3	102	LONG POINT GULLY	.00	.00	.00	6.80
WSTLD-3	105	ATWOOD ACRES	.00	.00	.00	64.50
WSTLD-3	107	U. ATWOOD BAYOU	.00	.00	.00	1.70
WSTLD-3	143	ACADIAN FINE FOODS	.00	.00	.00	64.50
WSTLD-3	147	U. SILLS BAYOU	.00	.00	.00	1.70
WSTLD-3	150	N. RAYNE POTW	.00	.00	.00	64.50
WSTLD-3	194	U. BAYOU WIKOFF	.00	.00	.00	1.70
WSTLD-3	209	CROWLEY HIGH SCHOOL	.00	.00	.00	64.50
WSTLD-3	247	CROWLEY POTW	.00	.00	.00	21.50
WSTLD-3	287	RAYNE POTW	.00	.00	.00	21.50
WSTLD-3	395	ESTHERWOOD POTW	.00	.00	.00	64.50
WSTLD-3	438	BAYOU JONAS	.00	.00	.00	6.80

ENDATA26

\$\$\$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) \$\$\$

CARD TYPE	CONSTITUENT	CONCENTRATION
LOWER BC	TEMPERATURE	= 12.180 DEG C
LOWER BC	SALINITY	= .900 PPT
LOWER BC	CONSERVATIVE MATERIAL I	= .000 MG/L
LOWER BC	CONSERVATIVE MATERIAL II	= .000 MG/L
LOWER BC	DISSOLVED OXYGEN	= 6.290 MG/L
LOWER BC	BIOCHEMICAL OXYGEN DEMAND	= 6.660 MG/L
LOWER BC	ORGANIC NITROGEN	= .000 MG/L
LOWER BC	AMMONIA NITROGEN	= .000 MG/L
LOWER BC	NITRATE+NITRITE NITROGEN	= .000 MG/L
LOWER BC	PHOSPHORUS	= .000 MG/L
LOWER BC	CHLOROPHYLL A	= .000 UG/L
LOWER BC	COLIFORM	= .000 #/100 ML
LOWER BC	NONCONSERVATIVE MATERIAL	= 5.710 MG/L

ENDATA27

\$\$\$ DATA TYPE 28 (FLOW AUGMENTATION DATA) \$\$\$

CARD TYPE	REACH	AVAIL. HDWS	TARGET	ORDER OF AVAIL. SOURCES
ENDATA28				

\$\$\$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) \$\$\$

CARD TYPE	PARAMETER	COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7	COL 8
ENDATA29									

\$\$\$ DATA TYPE 30 (PLOT CONTROL CARDS) \$\$\$

NUMBER OF PLOTS =	4
NUMBER OF REACHES IN PLOT 1 =	2 INCREMENT = .10
PLOT RCH	7 8
NUMBER OF REACHES IN PLOT 2 =	3 INCREMENT = .20
PLOT RCH	10 11 12
NUMBER OF REACHES IN PLOT 3 =	1 INCREMENT = .10
PLOT RCH	14
NUMBER OF REACHES IN PLOT 4 =	1 INCREMENT = .10
PLOT RCH	23

ENDATA30

.....NO ERRORS DETECTED IN INPUT DATA

.....HYDRAULIC CALCULATIONS COMPLETED

.....TRIANGONAL MATRIX TERMS INITIALIZED

.....OXYGEN DEPENDENT RATES CONVERGENT IN 1 ITERATIONS

.....CONSTITUENT CALCULATIONS COMPLETED

1. INTERMEDIATE REPORT

DISSOLVED OXYGEN

MG/L

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	1	1	8.69	8.56	8.45	8.37	8.30	8.25	8.20	8.17	8.13	8.11
PB	1	11	8.09	8.07	8.05	8.03	7.98	7.87	7.45	6.71	6.67	6.62
PB	2	21	6.39									
PB	3	22	6.18	6.04	5.92	5.83	5.75	5.69	5.65	5.61	5.59	5.58
PB	3	32	5.57	5.57	5.58	5.59	5.60	5.62	5.64	5.67	5.69	5.72
PB	3	42	5.75	5.78	5.81	5.84	5.87	5.90	5.93	5.96	5.99	6.02
PB	3	52	6.05	6.08	6.12	6.15	6.18	6.21	6.23	6.26	6.29	6.32
PB	3	62	6.35	6.38	6.40	6.43	6.46	6.48	6.51	6.53	6.56	6.58
PB	3	72	6.60	6.63	6.65	6.67	6.70	6.73	6.77	6.88	7.19	
PB	4	81	6.91	6.81	6.83	6.90	6.99	7.08	7.16	7.24	7.30	7.36
PB	4	91	7.41	7.45	7.50	7.64	7.53	7.49	7.43	7.30		
PB	5	95	7.62	7.60	7.57	7.55						
PB	6	103	7.04	6.95								
PB	9	141	6.94	6.85								
PB	13	205	6.78	6.54	6.34	6.19	6.01	5.97	5.93	5.88	5.83	5.77
PB	15	228	6.14	6.11	6.08	6.05	5.40	5.31	5.21	5.11	5.00	4.89
PB	15	238	5.71	5.64	5.56	5.48	4.94	4.96	4.98			
PB	15	240	4.89	4.90	4.91	4.92	4.91	4.92	4.98			
PB	16	255	5.00	5.02	5.05	5.07	5.09	5.12	5.14	5.16	5.19	5.21
PB	16	265	5.24	5.26	5.28	5.31	5.33	5.35	5.37	5.39	5.41	5.43
PB	16	275	5.45	5.46	5.48	5.49	5.50	5.50	5.51	5.51	5.50	5.49
PB	16	285	5.47	5.45								
PB	22	390	5.42	5.42	5.42	5.42	5.43					
PB	24	405	5.43	5.43	5.42	5.42	5.42	5.41	5.41	5.41	5.41	5.40
PB	24	415	5.40	5.39	5.39	5.38	5.38	5.37	5.36	5.36	5.35	5.34
PB	24	425	5.32	5.31	5.30	5.28	5.26	5.24	5.22	5.20		
PB	25	433	5.12	5.05	5.03	5.04	5.08	5.17				
PB	26	439	5.32	5.47	5.63	5.79	5.97	6.17				
AG	7	105	5.22	7.17								
AB	8	107	8.20	8.12	8.06	8.02	7.98	7.96	7.94	7.93	7.93	7.93
AB	8	117	7.93	7.93	7.94	7.94	7.95	7.96	7.96	7.97	7.98	7.99
AB	8	127	8.00	8.01	8.02	8.02	8.03	8.04	8.05	8.06	8.06	8.06
AB	8	137	8.04	7.97	7.73	6.96						
SG	10	143	8.39	8.29	8.23	8.25	8.00	7.97	7.94	7.91	7.88	7.86
SB	11	147	8.38	8.31	8.21	8.04	7.78	7.76	7.75	7.75	7.74	7.73
SB	11	157	7.84	7.82	7.80	7.79	7.71	7.71	7.71	7.71	7.71	7.71
SB	11	167	7.73	7.72	7.72	7.72	7.71	7.71	7.71	7.71	7.71	7.71

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
SB	11	177	7.71	7.72	7.72	7.72	7.72	7.72	7.72	7.73	7.73	7.74
SB	11	187	7.74	7.74	7.75	7.75	7.76	7.78	7.82	7.82	7.82	8.56
BW	12	194	8.28	8.38	8.44	8.48	8.52	8.54	8.57	8.58	8.60	8.56
BW	12	204	7.30									
CG	14	209	5.35	5.39	5.58	5.82	6.04	6.25	6.42	6.58	6.71	6.82
CG	14	219	6.91	6.99	7.06	7.13	7.18	7.22	7.25	7.15	6.16	7.35
BB	17	287	6.85	6.92	6.98	7.04	7.10	7.15	7.21	7.26	7.30	7.35
BR	17	297	7.39	7.44	7.48	7.51	7.55	7.58	7.62	7.65	7.69	7.71
BB	17	307	7.73	7.76	7.78	7.79	7.76					
BR	18	312	7.66	7.59	7.53	7.49	7.44					
BB	19	316	7.47	7.45	7.45	7.44	7.44					
BB	20	321	7.42	7.40	7.39	7.37	7.37	7.36	7.36	7.36	7.36	7.36
BB	20	331	7.36	7.37	7.37	7.38	7.38	7.39	7.40	7.41	7.42	7.43
BR	20	341	7.44	7.45	7.46	7.47	7.48	7.49	7.50	7.51	7.52	7.53
BE	20	351	7.54	7.55	7.56	7.57	7.58	7.59	7.60	7.61	7.62	7.64
BR	20	361	7.65	7.66	7.67	7.68	7.69	7.70	7.71	7.72	7.72	7.72
BB	20	371	7.69	7.49	6.62	5.74	5.65	5.59	5.53	5.49	5.45	5.40
BB	21	374	6.23	6.02	5.86	5.74	5.65	5.59	5.53	5.49	5.45	5.40
BB	21	384	5.36	5.32	5.28	5.26	5.27	5.37	5.27	7.42	6.92	5.47
CT	23	395	8.18	8.07	7.97	7.88	7.80	7.72	7.62	7.42	6.92	5.47

1. INTERMEDIATE REPORT

BIOCHEMICAL OXYGEN DEMAND
MG/L

BAYOU PLAQUEMINI, BRULF. WATERSHED
WINTER PROJECTION RUII

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	1	1	9.7	9.8	9.8	9.9	9.9	10.0	10.0	10.1	10.1	10.2
PB	1	11	10.2	10.3	10.4	10.5	10.9	12.6	18.9	31.5	31.2	30.9
PB	2	21	30.3									
PB	3	22	29.7	29.2	28.7	28.2	27.7	27.2	26.8	26.3	25.9	25.4
PB	3	32	25.0	24.6	24.2	23.8	23.4	23.0	22.6	22.2	21.9	21.5
PB	3	42	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4
PB	3	52	18.1	17.8	17.6	17.3	17.0	16.8	16.5	16.3	16.1	15.8
PB	3	62	15.6	15.4	15.2	14.9	14.7	14.5	14.3	14.1	13.9	13.8
PB	3	72	13.6	13.4	13.2	13.0	12.9	12.6	12.3	11.6	9.6	
PB	4	81	8.7	7.8	7.1	6.5	6.1	5.7	5.4	5.1	4.9	4.8
PB	4	91	4.6	4.5	4.5	4.6						
PD	5	95	4.8	4.9	5.0	5.0	5.0	5.1	5.2	5.4		
PB	6	103	5.8	6.0								
PB	9	141	6.1	6.1								
PB	13	205	5.9	6.0	6.1	6.2	6.4	6.4	6.5	6.6	6.6	6.7
PB	15	228	6.2	6.3	6.3	6.3	7.4	7.6	7.8	8.1	8.4	8.7
PB	15	238	6.8	6.9	7.1	7.2	7.9	7.7	7.6	6.7	6.6	6.5
PB	15	248	8.6	8.4	8.2	8.1	7.9	6.8	6.7	6.7	6.6	6.5
PB	16	255	7.4	7.3	7.2	7.1	6.9	6.1	6.0	6.0	5.9	5.9
PB	16	265	6.4	6.3	6.3	6.2	6.1	5.6	5.5	5.5	5.4	5.4
PB	16	275	5.8	5.8	5.7	5.7	5.6					
PB	16	285	5.3	5.3								
PB	22	390	5.2	5.2	5.2	5.1	5.1	4.9	4.9	4.9	4.8	4.8
PB	24	405	5.1	5.1	5.0	5.0	4.7	4.7	4.6	4.6	4.6	4.6
PB	24	415	4.8	4.8	4.7	4.7	4.4	4.4	4.4	4.4		
PB	24	425	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.4		
PB	25	433	4.3	4.2	4.2	4.2	4.3	4.2	4.2	4.3		
PB	26	439	4.8	5.2	5.5	5.8	6.1	6.4	6.4	6.4		

1. INTERMEDIATE REPORT
 HBOD
 MG/L

BAYOU PLAQUEMINE BRUILE WATERSHED
 WINTER PROJECTION RUN

ID	RCH	ELEM	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
PB	1	1	7.68	7.80	7.91	8.03	8.14	8.26	8.37	8.48	8.59	8.70
PB	1	11	8.80	8.92	9.05	9.25	9.74	11.37	17.50	29.53	29.37	29.21
PB	2	21	28.84	28.08	27.74	27.40	27.07	26.74	26.42	26.09	25.78	25.46
PB	3	22	28.43	24.85	24.55	24.25	23.95	23.66	23.37	23.09	22.81	22.53
PB	3	32	25.15	21.99	21.72	21.45	21.19	20.94	20.68	20.43	20.18	19.94
PB	3	42	22.26	19.45	19.22	18.98	18.75	18.52	18.30	18.08	17.86	17.64
PB	3	52	19.69	17.21	17.00	16.80	16.59	16.39	16.19	16.00	15.80	15.61
PB	3	62	17.43	15.23	15.04	14.86	14.66	14.44	14.11	13.43	11.52	
PB	4	81	15.42	9.81	9.10	8.50	7.99	7.56	7.20	6.89	6.63	6.40
PB	4	91	10.65	6.21	5.89	5.68	5.13	5.15	5.22	5.41		
PB	5	95	5.39	5.26	5.19	5.14						
PB	6	103	5.63	5.74								
PB	9	141	5.87	5.97								
PB	13	205	5.99	6.40	6.93	7.73						
PB	15	228	8.52	8.81	9.10	9.40	9.69	9.99	10.28	10.58	10.88	11.18
PB	15	238	11.48	11.79	12.11	12.43	12.75	13.09	13.43	13.79	14.15	14.53
PB	15	248	14.64	14.75	14.86	14.96	15.06	15.16	15.26	15.36	15.46	15.56
PB	16	255	15.33	15.40	15.46	15.52	15.58	15.64	15.69	15.75	15.79	15.84
PB	16	265	15.88	15.96	15.96	15.99	16.01	16.03	16.05	16.06	16.06	16.06
PB	16	275	16.05	16.03	16.00	15.97	15.92	15.86	15.79	15.70	15.60	15.48
PB	16	285	15.34	15.18	15.10	15.12	15.12					
PB	22	390	15.07	15.09	15.10	15.12	15.12	15.17	15.17	15.17	15.17	15.16
PB	24	405	15.12	15.14	15.15	15.16	15.17	15.17	15.17	14.93	14.88	14.83
PB	24	415	15.14	15.13	15.11	15.08	15.05	15.02	14.98	14.93	14.88	
PB	24	425	14.77	14.70	14.63	14.55	14.46	14.37	14.27	14.16		
PB	25	433	13.81	13.30	12.84	12.43	12.05	11.72				
PB	26	439	11.44	11.01	10.42	9.60	8.45	6.84				
AG	7	105	42.94	15.35								
AB	8	107	6.17	6.14	6.10	6.07	6.04	6.01	5.98	5.96	5.93	5.90
AB	8	117	5.87	5.85	5.82	5.79	5.77	5.74	5.72	5.69	5.67	5.65
AB	8	127	5.62	5.60	5.58	5.56	5.54	5.52	5.50	5.48	5.46	5.45
AB	8	137	5.45	5.45	5.48	5.58						
SG	10	143	4.55	4.45	4.28	3.87						
SB	11	147	3.21	3.38	3.82	4.95	4.92	4.89	4.86	4.84	4.81	4.78
SB	11	157	4.75	4.72	4.69	4.66	4.64	4.61	4.58	4.55	4.53	4.50
SB	11	167	4.47	4.45	4.42	4.39	4.37	4.34	4.32	4.29	4.26	4.24
SB	11	177	4.21	4.19	4.16	4.14	4.11	4.09	4.06	4.04	4.02	3.99
SB	11	187	3.97	3.94	3.92	3.89	3.86	3.81	3.73			
BW	12	194	3.04	2.93	2.83	2.73	2.64	2.54	2.46	2.37	2.30	2.39
BW	12	204	5.25									
CG	14	209	59.31	56.07	53.01	50.11	47.38	44.79	42.34	40.03	37.85	35.78
CG	14	219	33.82	31.97	30.22	28.54	26.88	25.11	22.81	18.66	8.61	
BB	17	287	18.98	18.96	18.94	18.92	18.90	18.88	18.86	18.84	18.82	18.81
BB	17	297	18.79	18.77	18.75	18.73	18.71	18.69	18.67	18.65	18.63	18.62
BB	17	307	18.60	18.57	18.54	18.48	18.35					
BB	18	312	18.03	17.74	17.45	17.17						
BB	19	316	16.89	16.62	16.36	16.12	15.92					

BB	20	321	15.78	15.62	15.46	15.30	15.15	15.00	14.85	14.70	14.55	14.40
BB	20	331	14.26	14.11	13.97	13.83	13.69	13.55	13.42	13.28	13.15	13.01
BB	20	341	12.88	12.75	12.62	12.50	12.37	12.25	12.12	12.00	11.88	11.76
BB	20	351	11.64	11.52	11.41	11.29	11.18	11.07	10.95	10.84	10.73	10.63
BB	20	361	10.52	10.41	10.31	10.20	10.10	10.00	9.90	9.80	9.70	9.59
BB	20	371	9.47	9.28	8.80							
BB	21	374	8.64	8.55	8.48	8.44	8.43	8.45	8.52	8.64	8.83	9.11
BB	21	384	9.49	10.01	10.72	11.66	12.90	14.54	6.31	7.06	9.17	14.96
CT	23	395	6.16	6.11	6.06	6.02	6.01	6.06				

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CAPSULE SUMMARY
B. PLAQUERINE BRULE

DIST	FLOW	TEMP	SALIN	DO	FINOD	ORGIU	IH3	CHLA	REARER	CBOD	CFOD	NIH3	SOD
KM	CMS	DEG C	PPT	MG/L	MG/L	MG/L	UG/L	UG/L	RATE	DECA	SEIT	DECA	SOD
									1/DA	1/DA	1/DA	1/DA	1/DA
RDWTR	.028	15.7	.0	8.9	9.6	.0	.0	.0	2.21	.11	.05	.00	.76
70.00	.028	15.7	.1	8.7	9.7	.0	1.0	.0	2.21	.11	.05	.00	.76
69.80	.028	15.7	.1	8.6	9.8	.0	1.0	.0	2.21	.11	.05	.00	.76
69.60	.028	15.7	.1	8.5	9.8	.0	1.0	.0	2.21	.11	.05	.00	.76
69.40	.028	15.7	.1	8.4	9.9	.0	1.0	.0	2.21	.11	.05	.00	.76
69.20	.028	15.7	.1	8.3	9.9	.0	1.0	.0	2.21	.11	.05	.00	.76
69.00	.028	15.7	.1	8.2	10.0	.0	1.0	.0	2.21	.11	.05	.00	.76
68.80	.028	15.7	.1	8.2	10.0	.0	1.0	.0	2.21	.11	.05	.00	.76
68.60	.028	15.7	.1	8.2	10.1	.0	1.0	.0	2.21	.11	.05	.00	.76
68.40	.028	15.7	.1	8.1	10.1	.0	1.0	.0	2.21	.11	.05	.00	.76
68.20	.028	15.7	.1	8.1	10.2	.0	1.0	.0	2.21	.11	.05	.00	.76
68.00	.028	15.7	.1	8.1	10.2	.0	1.0	.0	2.21	.11	.05	.00	.76
67.80	.028	15.7	.1	8.1	10.3	.0	1.0	.0	2.21	.11	.05	.00	.76
67.60	.028	15.7	.1	8.0	10.4	.0	1.0	.0	2.21	.11	.05	.00	.76
67.40	.028	15.7	.1	8.0	10.5	.0	1.0	.0	2.21	.11	.05	.00	.76
67.20	.028	15.7	.1	8.0	10.5	.0	1.0	.0	2.21	.11	.05	.00	.76
67.00	.028	15.7	.1	7.9	12.6	.0	1.0	.0	2.21	.11	.05	.00	.76
66.80	.028	15.7	.1	7.5	18.9	.0	1.0	.0	2.21	.11	.05	.00	.76
66.60	.072	15.7	.1	6.7	31.5	.0	1.0	.0	2.21	.11	.04	.00	.76
66.40	.072	15.7	.1	6.7	31.2	.0	1.0	.0	2.21	.11	.04	.00	.76
66.20	.072	15.7	.1	6.6	30.9	.0	1.0	.0	2.21	.11	.04	.00	.76
66.00	.072	15.7	.1	6.4	30.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
65.80	.072	15.7	.1	6.2	29.7	.0	1.0	.0	1.58	.11	.10	.00	1.07
65.60	.072	15.7	.1	6.0	29.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
65.40	.072	15.7	.1	5.9	28.7	.0	1.0	.0	1.58	.11	.10	.00	1.07
65.20	.072	15.7	.1	5.8	28.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
65.00	.072	15.7	.1	5.7	27.7	.0	1.0	.0	1.58	.11	.10	.00	1.07
64.80	.072	15.7	.1	5.7	27.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
64.60	.072	15.7	.1	5.6	26.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
64.40	.072	15.7	.1	5.6	26.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
64.20	.072	15.7	.1	5.6	25.9	.0	1.0	.0	1.58	.11	.10	.00	1.07
64.00	.072	15.7	.1	5.6	25.4	.0	1.0	.0	1.58	.11	.10	.00	1.07
63.80	.072	15.7	.1	5.6	25.0	.0	1.0	.0	1.58	.11	.10	.00	1.07
63.60	.072	15.7	.1	5.6	24.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
63.40	.072	15.7	.1	5.6	24.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
63.20	.072	15.7	.1	5.6	23.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
63.00	.072	15.7	.1	5.6	23.4	.0	1.0	.0	1.58	.11	.10	.00	1.07
62.80	.072	15.7	.1	5.6	23.0	.0	1.0	.0	1.58	.11	.10	.00	1.07

62.60	.072	15.7	.1	5.6	22.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
62.40	.072	15.7	.1	5.7	22.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
62.20	.072	15.7	.1	5.7	21.9	.0	1.0	.0	1.58	.11	.10	.00	1.07
62.00	.072	15.7	.1	5.7	21.5	.0	1.0	.0	1.58	.11	.10	.00	1.07
61.80	.072	15.7	.1	5.7	21.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
61.60	.072	15.7	.1	5.8	20.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
61.40	.072	15.7	.1	5.8	20.5	.0	1.0	.0	1.58	.11	.10	.00	1.07
61.20	.072	15.7	.1	5.8	20.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
61.00	.072	15.7	.1	5.9	19.9	.0	1.0	.0	1.58	.11	.10	.00	1.07
60.80	.072	15.7	.1	5.9	19.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
60.60	.072	15.7	.1	5.9	19.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
60.40	.072	15.7	.1	6.0	19.0	.0	1.0	.0	1.58	.11	.10	.00	1.07
60.20	.072	15.7	.1	6.0	18.7	.0	1.0	.0	1.58	.11	.10	.00	1.07
60.00	.072	15.7	.1	6.1	18.4	.0	1.0	.0	1.58	.11	.10	.00	1.07
59.80	.072	15.7	.1	6.1	18.1	.0	1.0	.0	1.58	.11	.10	.00	1.07
59.60	.072	15.7	.1	6.1	17.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
59.40	.072	15.7	.1	6.1	17.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
59.20	.072	15.7	.1	6.1	17.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
59.00	.072	15.7	.1	6.2	17.0	.0	1.0	.0	1.58	.11	.10	.00	1.07
58.80	.072	15.7	.1	6.2	16.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
58.60	.072	15.7	.1	6.2	16.5	.0	1.0	.0	1.58	.11	.10	.00	1.07
58.40	.072	15.7	.1	6.3	16.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
58.20	.072	15.7	.1	6.3	16.1	.0	1.0	.0	1.58	.11	.10	.00	1.07
58.00	.072	15.7	.1	6.3	15.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
57.80	.072	15.7	.1	6.3	15.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
57.60	.072	15.7	.1	6.4	15.4	.0	1.0	.0	1.58	.11	.10	.00	1.07
57.40	.072	15.7	.1	6.4	15.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
57.20	.072	15.7	.1	6.4	14.9	.0	1.0	.0	1.58	.11	.10	.00	1.07
57.00	.072	15.7	.1	6.5	14.7	.0	1.0	.0	1.58	.11	.10	.00	1.07
56.80	.072	15.7	.1	6.5	14.5	.0	1.0	.0	1.58	.11	.10	.00	1.07
56.60	.072	15.7	.1	6.5	14.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
56.40	.072	15.7	.1	6.5	14.1	.0	1.0	.0	1.58	.11	.10	.00	1.07
56.20	.072	15.7	.1	6.6	13.9	.0	1.0	.0	1.58	.11	.10	.00	1.07
56.00	.072	15.7	.1	6.6	13.8	.0	1.0	.0	1.58	.11	.10	.00	1.07
55.80	.072	15.7	.1	6.6	13.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
55.60	.072	15.7	.1	6.6	13.4	.0	1.0	.0	1.58	.11	.10	.00	1.07
55.40	.072	15.7	.1	6.7	13.2	.0	1.0	.0	1.58	.11	.10	.00	1.07
55.20	.072	15.7	.1	6.7	13.0	.0	1.0	.0	1.58	.11	.10	.00	1.07
55.00	.072	15.7	.1	6.7	12.9	.0	1.0	.0	1.58	.11	.10	.00	1.07
54.80	.072	15.7	.1	6.7	12.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
54.60	.072	15.7	.1	6.8	12.3	.0	1.0	.0	1.58	.11	.10	.00	1.07
54.40	.072	15.7	.1	6.9	11.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
54.20	.100	15.7	.1	7.2	9.6	.0	1.0	.0	1.58	.11	.10	.00	1.07
53.20	.100	15.7	.1	6.9	8.7	.0	1.0	.0	.75	.11	.10	.00	.76
52.20	.100	15.7	.1	6.8	7.8	.0	1.0	.0	.75	.11	.10	.00	.76
51.20	.100	15.7	.1	6.8	7.1	.0	1.0	.0	.75	.11	.10	.00	.76
50.20	.100	15.7	.1	6.9	6.5	.0	1.0	.0	.75	.11	.10	.00	.76
49.20	.100	15.7	.1	7.0	6.1	.0	1.0	.0	.75	.11	.10	.00	.76
48.20	.100	15.7	.1	7.1	5.7	.0	1.0	.0	.75	.11	.10	.00	.76
47.20	.100	15.7	.1	7.2	5.4	.0	1.0	.0	.75	.11	.10	.00	.76
46.20	.100	15.7	.1	7.2	5.1	.0	1.0	.0	.75	.11	.10	.00	.76
45.20	.100	15.7	.1	7.3	4.9	.0	1.0	.0	.75	.11	.10	.00	.76
44.20	.100	15.7	.1	7.4	4.8	.0	1.0	.0	.75	.11	.10	.00	.76
43.20	.100	15.7	.1	7.4	4.6	.0	1.0	.0	.75	.11	.10	.00	.76
42.20	.100	15.7	.1	7.5	4.5	.0	1.0	.0	.75	.11	.10	.00	.76

41.20	.100	15.7	.1	7.5	4.5	.0	1.0	.0	.75	.11	.10	.00	.76
40.20	.129	15.7	.1	7.6	4.6	.0	1.0	.0	.75	.11	.10	.00	.76
39.20	.129	15.7	.1	7.6	4.8	.0	1.0	.0	.30	.11	.10	.00	.38
38.20	.129	15.7	.1	7.6	4.9	.0	1.0	.0	.30	.11	.10	.00	.38
37.20	.129	15.7	.1	7.6	5.0	.0	1.0	.0	.30	.11	.10	.00	.38
36.20	.129	15.7	.1	7.6	5.0	.0	1.0	.0	.30	.11	.10	.00	.38
35.20	.129	15.7	.1	7.5	5.1	.0	1.0	.0	.30	.11	.10	.00	.38
34.20	.129	15.7	.1	7.4	5.2	.0	1.0	.0	.30	.11	.10	.00	.38
33.20	.157	15.7	.1	7.3	5.4	.0	1.0	.0	.29	.11	.10	.00	.38
32.20	.157	15.7	.1	7.0	5.8	.0	1.0	.0	.29	.11	.08	.00	.38
31.80	.157	15.7	.1	6.9	6.0	.0	1.0	.0	.29	.11	.08	.00	.38
31.40	.157	15.7	.1	6.9	6.1	.0	1.0	.0	.34	.10	.08	.00	.38
30.85	.188	15.7	.1	6.9	6.1	.0	1.0	.0	.34	.10	.08	.00	.38
30.30	.188	15.7	.1	6.9	6.1	.0	1.0	.0	.25	.10	.08	.00	.38
29.50	.276	15.7	.1	6.8	5.9	.0	1.0	.0	.25	.10	.08	.00	.38
28.70	.276	15.7	.1	6.5	6.0	.0	1.0	.0	.25	.10	.08	.00	.38
28.90	.276	15.7	.1	6.3	6.1	.0	1.0	.0	.25	.10	.08	.00	.38
27.90	.276	15.7	.1	6.2	6.2	.0	1.0	.0	.25	.10	.08	.00	.38
27.10	.277	15.7	.1	6.1	6.2	.0	1.0	.0	.22	.10	.05	.00	.00
26.90	.277	15.7	.1	6.1	6.2	.0	1.0	.0	.22	.10	.05	.00	.00
26.70	.277	15.7	.1	6.1	6.3	.0	1.0	.0	.22	.10	.05	.00	.00
26.50	.277	15.7	.1	6.1	6.3	.0	1.0	.0	.22	.10	.05	.00	.00
26.30	.277	15.7	.1	6.0	6.3	.0	1.0	.0	.22	.10	.05	.00	.00
26.10	.277	15.7	.1	6.0	6.4	.0	1.0	.0	.22	.10	.05	.00	.00
25.90	.277	15.7	.1	6.0	6.4	.0	1.0	.0	.22	.10	.05	.00	.00
25.70	.277	15.7	.1	5.9	6.5	.0	1.0	.0	.22	.10	.05	.00	.00
25.50	.277	15.7	.1	5.9	6.5	.0	1.0	.0	.22	.10	.05	.00	.00
25.30	.277	15.7	.1	5.8	6.6	.0	1.0	.0	.22	.10	.05	.00	.00
25.10	.277	15.7	.1	5.8	6.7	.0	1.0	.0	.22	.10	.05	.00	.00
24.90	.277	15.7	.1	5.7	6.8	.0	1.0	.0	.22	.10	.05	.00	.00
24.70	.277	15.7	.1	5.7	6.9	.0	1.0	.0	.22	.10	.05	.00	.00
24.50	.277	15.7	.1	5.6	6.9	.0	1.0	.0	.22	.10	.05	.00	.00
24.30	.277	15.7	.1	5.6	7.1	.0	1.0	.0	.22	.10	.05	.00	.00
24.10	.277	15.7	.1	5.5	7.2	.0	1.0	.0	.22	.10	.05	.00	.00
23.90	.277	15.7	.1	5.4	7.4	.0	1.0	.0	.22	.10	.05	.00	.00
23.70	.277	15.7	.1	5.4	7.4	.0	1.0	.0	.22	.10	.05	.00	.00
23.50	.277	15.7	.1	5.3	7.6	.0	1.0	.0	.22	.10	.05	.00	.00
23.30	.277	15.7	.1	5.2	7.8	.0	1.0	.0	.22	.10	.05	.00	.00
23.10	.277	15.7	.1	5.1	8.1	.0	1.0	.0	.22	.10	.05	.00	.00
22.90	.277	15.7	.1	5.0	8.1	.0	1.0	.0	.22	.10	.05	.00	.00
22.70	.413	15.7	.1	4.9	8.7	.0	1.0	.0	.22	.10	.05	.00	.00
22.50	.413	15.7	.1	4.9	8.6	.0	1.0	.0	.22	.10	.05	.00	.00
22.30	.413	15.7	.1	4.9	8.4	.0	1.0	.0	.22	.10	.05	.00	.00
22.10	.413	15.7	.1	4.9	8.2	.0	1.0	.0	.22	.10	.05	.00	.00
21.90	.413	15.7	.1	4.9	8.1	.0	1.0	.0	.22	.10	.05	.00	.00
21.70	.413	15.7	.1	4.9	7.9	.0	1.0	.0	.22	.10	.05	.00	.00
21.50	.413	15.7	.1	5.0	7.7	.0	1.0	.0	.22	.10	.05	.00	.00
21.30	.413	15.7	.1	5.0	7.6	.0	1.0	.0	.22	.10	.05	.00	.00
21.10	.413	15.7	.1	5.0	7.4	.0	1.0	.0	.22	.10	.05	.00	.00
20.90	.413	15.7	.1	5.0	7.3	.0	1.0	.0	.22	.10	.05	.00	.00
20.70	.413	15.7	.1	5.0	7.2	.0	1.0	.0	.22	.10	.05	.00	.00
20.50	.413	15.7	.1	5.1	7.1	.0	1.0	.0	.22	.10	.05	.00	.00
20.30	.413	15.7	.1	5.1	6.9	.0	1.0	.0	.22	.10	.05	.00	.00
20.10	.413	15.7	.1	5.1	6.8	.0	1.0	.0	.22	.10	.05	.00	.00
19.90	.413	15.7	.1	5.1	6.7	.0	1.0	.0	.22	.10	.05	.00	.00
19.70	.413	15.7	.1	5.2	6.6	.0	1.0	.0	.22	.10	.05	.00	.00
19.50	.413	15.7	.1	5.2	6.5	.0	1.0	.0	.22	.10	.05	.00	.00
19.30	.413	15.7	.1	5.2	6.5	.0	1.0	.0	.22	.10	.05	.00	.00
19.10	.413	15.7	.1	5.2	6.5	.0	1.0	.0	.22	.10	.05	.00	.00
18.90	.413	15.7	.1	5.2	6.5	.0	1.0	.0	.22	.10	.05	.00	.00
18.70	.413	15.7	.1	5.2	6.5	.0	1.0	.0	.22	.10	.05	.00	.00

11.00	.554	15.7	.1	5.1	4.3	.0	1.0	.0	.14	.10	.05	.00	.00
10.00	.554	15.7	.1	5.1	4.2	.0	1.0	.0	.14	.10	.05	.00	.00
9.00	.554	15.7	.1	5.0	4.2	.0	1.0	.0	.14	.10	.05	.00	.00
8.00	.554	15.7	.1	5.1	4.3	.0	1.0	.0	.14	.10	.05	.00	.00
6.00	.582	15.7	.1	5.2	4.5	.0	1.0	.0	.14	.10	.05	.00	.00
5.00	.582	15.1	.2	5.3	4.8	.0	.8	.0	.16	.10	.05	.00	.00
4.00	.582	14.5	.4	5.5	5.2	.0	.7	.0	.16	.09	.05	.00	.00
3.00	.582	13.9	.5	5.6	5.5	.0	.5	.0	.16	.09	.05	.00	.00
2.00	.582	13.4	.6	5.8	5.8	.0	.3	.0	.16	.09	.05	.00	.00
1.00	.582	12.8	.8	6.0	6.1	.0	.2	.0	.15	.09	.05	.00	.00
.00	.582	12.2	.9	6.2	6.4	.0	.0	.0	.15	.08	.05	.00	.00

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CAPSULE SUMMARY
ATWOOD GULLY

DIST KI	FLOW CMS	TEMP DEG C	SALIN PPT	DO MG/L	FMOD MG/L	ORGN MG/L	NH3 MG/L	CHLA UG/L	REAER				SOD
									RATE 1/DA	CBOD 1/DA	SEIT 1/DA	DECA 1/DA	
RDWTR	.000	.0	.0	8.9	4.6	.0	.0	.0	2.45	.11	.22	.00	1.22
3.50	.003	15.7	.1	5.2	43.2	.0	1.0	.0	2.45	.11	.22	.00	1.22
3.40	.003	15.7	.1	7.2	19.5	.0	1.0	.0	2.07	.11	.09	.00	.76
3.30	.031	15.7	.1	8.2	12.5	.0	1.0	.0	2.07	.11	.09	.00	.76
3.20	.031	15.7	.1	8.1	12.2	.0	1.0	.0	2.07	.11	.09	.00	.76
3.10	.031	15.7	.1	8.1	12.0	.0	1.0	.0	2.07	.11	.09	.00	.76
3.00	.031	15.7	.1	8.0	11.7	.0	1.0	.0	2.07	.11	.09	.00	.76
2.90	.031	15.7	.1	8.0	11.5	.0	1.0	.0	2.07	.11	.09	.00	.76
2.80	.031	15.7	.1	8.0	11.2	.0	1.0	.0	2.07	.11	.09	.00	.76
2.70	.031	15.7	.1	7.9	11.0	.0	1.0	.0	2.07	.11	.09	.00	.76
2.60	.031	15.7	.1	7.9	10.8	.0	1.0	.0	2.07	.11	.09	.00	.76
2.50	.031	15.7	.1	7.9	10.6	.0	1.0	.0	2.07	.11	.09	.00	.76
2.40	.031	15.7	.1	7.9	10.4	.0	1.0	.0	2.07	.11	.09	.00	.76
2.30	.031	15.7	.1	7.9	10.1	.0	1.0	.0	2.07	.11	.09	.00	.76
2.20	.031	15.7	.1	7.9	9.9	.0	1.0	.0	2.07	.11	.09	.00	.76
2.10	.031	15.7	.1	7.9	9.8	.0	1.0	.0	2.07	.11	.09	.00	.76
2.00	.031	15.7	.1	7.9	9.6	.0	1.0	.0	2.07	.11	.09	.00	.76
1.90	.031	15.7	.1	7.9	9.4	.0	1.0	.0	2.07	.11	.09	.00	.76
1.80	.031	15.7	.1	8.0	9.2	.0	1.0	.0	2.07	.11	.09	.00	.76
1.70	.031	15.7	.1	8.0	9.0	.0	1.0	.0	2.07	.11	.09	.00	.76
1.60	.031	15.7	.1	8.0	8.9	.0	1.0	.0	2.07	.11	.09	.00	.76
1.50	.031	15.7	.1	8.0	8.7	.0	1.0	.0	2.07	.11	.09	.00	.76
1.40	.031	15.7	.1	8.0	8.5	.0	1.0	.0	2.07	.11	.09	.00	.76
1.30	.031	15.7	.1	8.0	8.4	.0	1.0	.0	2.07	.11	.09	.00	.76
1.20	.031	15.7	.1	8.0	8.2	.0	1.0	.0	2.07	.11	.09	.00	.76
1.10	.031	15.7	.1	8.0	8.1	.0	1.0	.0	2.07	.11	.09	.00	.76
1.00	.031	15.7	.1	8.0	7.9	.0	1.0	.0	2.07	.11	.09	.00	.76
.90	.031	15.7	.1	8.0	7.8	.0	1.0	.0	2.07	.11	.09	.00	.76
.80	.031	15.7	.1	8.0	7.7	.0	1.0	.0	2.07	.11	.09	.00	.76
.70	.031	15.7	.1	8.0	7.5	.0	1.0	.0	2.07	.11	.09	.00	.76
.60	.031	15.7	.1	8.1	7.4	.0	1.0	.0	2.07	.11	.09	.00	.76
.50	.031	15.7	.1	8.1	7.3	.0	1.0	.0	2.07	.11	.09	.00	.76
.40	.031	15.7	.1	8.1	7.1	.0	1.0	.0	2.07	.11	.09	.00	.76
.30	.031	15.7	.1	8.0	7.0	.0	1.0	.0	2.07	.11	.09	.00	.76
.20	.031	15.7	.1	8.0	6.8	.0	1.0	.0	2.07	.11	.09	.00	.76

.10 .031 15.7 .1 7.7 6.6 .0 1.0 .0 2.07 .11 .09 .00 .76
 .00 .031 15.7 .1 7.0 6.1 .0 1.0 .0 2.07 .11 .09 .00 .76

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CAPSULE SUMMARY
 SILL'S GULLY

DIST RM	FLOW CMS	TEMP DEG C	SALIN PPT	IXO MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	CHLA US/L	REARER CBOD		NH3		SOD
									RATE 1/DA	DFCA 1/DA	SEFTT 1/DA	DECA 1/DA	
HDWTR	.028	.0	8.9	9.5	.0	.0	.0	.0	2.65	.11	.23	.00	1.22
16.05	.030	15.7	.1	8.4	11.9	.0	1.0	.0	2.65	.11	.23	.00	1.22
15.90	.030	15.7	.1	8.3	11.6	.0	1.0	.0	2.65	.11	.23	.00	1.22
15.80	.030	15.7	.1	9.2	11.3	.0	1.0	.0	2.65	.11	.23	.00	1.22
15.70	.030	15.7	.1	8.2	10.9	.0	1.0	.0	2.65	.11	.23	.00	1.22
15.60	.058	15.7	.1	8.4	10.3	.0	1.0	.0	2.52	.11	.22	.00	1.22
15.50	.058	15.7	.1	8.3	10.4	.0	1.0	.0	2.52	.11	.22	.00	1.22
15.40	.058	15.7	.1	8.2	10.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
15.30	.060	15.7	.1	8.0	11.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
15.20	.060	15.7	.1	8.0	11.5	.0	1.0	.0	2.52	.11	.22	.00	1.22
15.10	.060	15.7	.1	8.0	11.4	.0	1.0	.0	2.52	.11	.22	.00	1.22
15.00	.060	15.7	.1	7.9	11.3	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.90	.060	15.7	.1	7.9	11.1	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.80	.060	15.7	.1	7.9	11.0	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.70	.060	15.7	.1	7.9	10.9	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.60	.060	15.7	.1	7.8	10.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.50	.060	15.7	.1	7.8	10.6	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.40	.060	15.7	.1	7.8	10.5	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.30	.060	15.7	.1	7.8	10.4	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.20	.060	15.7	.1	7.8	10.2	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.10	.060	15.7	.1	7.8	10.1	.0	1.0	.0	2.52	.11	.22	.00	1.22
14.00	.060	15.7	.1	7.8	10.0	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.90	.060	15.7	.1	7.7	9.9	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.80	.060	15.7	.1	7.7	9.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.70	.060	15.7	.1	7.7	9.6	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.60	.060	15.7	.1	7.7	9.5	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.50	.060	15.7	.1	7.7	9.4	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.40	.060	15.7	.1	7.7	9.3	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.30	.060	15.7	.1	7.7	9.2	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.20	.060	15.7	.1	7.7	9.1	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.10	.060	15.7	.1	7.7	9.0	.0	1.0	.0	2.52	.11	.22	.00	1.22
13.00	.060	15.7	.1	7.7	8.8	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.90	.060	15.7	.1	7.7	8.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.80	.060	15.7	.1	7.7	8.6	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.70	.060	15.7	.1	7.7	8.5	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.60	.060	15.7	.1	7.7	8.4	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.50	.060	15.7	.1	7.7	8.3	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.40	.060	15.7	.1	7.7	8.2	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.30	.060	15.7	.1	7.7	8.1	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.20	.060	15.7	.1	7.7	8.0	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.10	.060	15.7	.1	7.7	7.9	.0	1.0	.0	2.52	.11	.22	.00	1.22
12.00	.060	15.7	.1	7.7	7.8	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.90	.060	15.7	.1	7.7	7.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.80	.060	15.7	.1	7.7	7.7	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.70	.060	15.7	.1	7.7	7.6	.0	1.0	.0	2.52	.11	.22	.00	1.22

11.60	.060	15.7	.1	7.7	7.5	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.50	.060	15.7	.1	7.7	7.4	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.40	.060	15.7	.1	7.7	7.3	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.30	.060	15.7	.1	7.8	7.2	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.20	.060	15.7	.1	7.8	7.1	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.10	.060	15.7	.1	7.8	7.1	.0	1.0	.0	2.52	.11	.22	.00	1.22
11.00	.060	15.7	.1	7.8	7.0	.0	1.0	.0	2.52	.11	.22	.00	1.22
10.00	.088	15.7	.1	8.3	7.3	.0	1.0	.0	2.80	.11	.14	.00	.84
9.00	.088	15.7	.1	8.4	6.9	.0	1.0	.0	2.80	.11	.14	.00	.84
8.00	.088	15.7	.1	8.4	6.4	.0	1.0	.0	2.80	.11	.14	.00	.84
7.00	.088	15.7	.1	8.5	6.0	.0	1.0	.0	2.80	.11	.14	.00	.84
6.00	.088	15.7	.1	8.5	5.7	.0	1.0	.0	2.80	.11	.14	.00	.84
5.00	.088	15.7	.1	8.5	5.3	.0	1.0	.0	2.80	.11	.14	.00	.84
4.00	.088	15.7	.1	8.6	5.0	.0	1.0	.0	2.80	.11	.14	.00	.84
3.00	.088	15.7	.1	8.6	4.7	.0	1.0	.0	2.80	.11	.14	.00	.84
2.00	.088	15.7	.1	8.6	4.4	.0	1.0	.0	2.80	.11	.14	.00	.84
1.00	.088	15.7	.1	8.6	4.2	.0	1.0	.0	2.80	.11	.14	.00	.84
.00	.088	15.7	.1	7.3	5.5	.0	1.0	.0	2.80	.11	.14	.00	.84

1 CAPSULE SUMMARY
CROWLEY HIGH GULLY

DIST KM	FLOW CMS	TEMP DEG C	SALN PPT	DO MG/L	EBOD MG/L	ORGI MG/L	IHS MG/L	CHLA UG/L	REAER				SOD
									CBOD I/DA	DECA I/DA	CBOD I/DA	DECA I/DA	
HDWTR	.000	.0	.0	8.9	4.6	.0	.0	.0	2.80	.11	.26	.00	1.30
1.80	.001	15.7	.1	5.3	52.6	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.70	.001	15.7	.1	5.4	43.7	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.60	.001	15.7	.1	5.6	36.4	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.50	.001	15.7	.1	5.8	30.3	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.40	.001	15.7	.1	6.0	25.3	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.30	.001	15.7	.1	6.2	21.2	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.20	.001	15.7	.1	6.4	17.8	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.10	.001	15.7	.1	6.6	15.1	.0	1.0	.0	2.80	.11	.26	.00	1.30
1.00	.001	15.7	.1	6.7	12.8	.0	1.0	.0	2.80	.11	.26	.00	1.30
.90	.001	15.7	.1	6.8	10.9	.0	1.0	.0	2.80	.11	.26	.00	1.30
.80	.001	15.7	.1	7.0	8.0	.0	1.0	.0	2.80	.11	.26	.00	1.30
.70	.001	15.7	.1	7.1	7.0	.0	1.0	.0	2.80	.11	.26	.00	1.30
.60	.001	15.7	.1	7.1	6.1	.0	1.0	.0	2.80	.11	.26	.00	1.30
.50	.001	15.7	.1	7.2	5.4	.0	1.0	.0	2.80	.11	.26	.00	1.30
.40	.001	15.7	.1	7.2	4.8	.0	1.0	.0	2.80	.11	.26	.00	1.30
.30	.001	15.7	.1	7.2	4.5	.0	1.0	.0	2.80	.11	.26	.00	1.30
.20	.001	15.7	.1	7.1	4.6	.0	1.0	.0	2.80	.11	.26	.00	1.30
.10	.001	15.7	.1	6.2	6.2	.0	1.0	.0	2.80	.11	.26	.00	1.30
.00	.001	15.7	.1	6.2	6.2	.0	1.0	.0	2.80	.11	.26	.00	1.30

18.40	.110 15.7	.1	7.4	14.0	.0	1.0	.0	1.49	.05	.00	.00	.76
18.10	.110 15.7	.1	7.4	14.0	.0	1.0	.0	1.49	.05	.00	.00	.76
17.80	.110 15.7	.1	7.4	13.9	.0	1.0	.0	1.49	.05	.00	.00	.76
17.50	.110 15.7	.1	7.4	13.8	.0	1.0	.0	1.49	.05	.00	.00	.76
17.20	.110 15.7	.1	7.4	13.8	.0	1.0	.0	1.49	.05	.00	.00	.76
16.90	.110 15.7	.1	7.4	13.7	.0	1.0	.0	1.49	.05	.00	.00	.76
16.60	.110 15.7	.1	7.4	13.7	.0	1.0	.0	1.49	.05	.00	.00	.76
16.30	.110 15.7	.1	7.4	13.6	.0	1.0	.0	1.49	.05	.00	.00	.76
16.00	.110 15.7	.1	7.4	13.5	.0	1.0	.0	1.49	.05	.00	.00	.76
15.70	.110 15.7	.1	7.4	13.5	.0	1.0	.0	1.49	.05	.00	.00	.76
15.40	.110 15.7	.1	7.5	13.4	.0	1.0	.0	1.49	.05	.00	.00	.76
15.10	.110 15.7	.1	7.5	13.4	.0	1.0	.0	1.49	.05	.00	.00	.76
14.80	.110 15.7	.1	7.5	13.3	.0	1.0	.0	1.49	.05	.00	.00	.76
14.50	.110 15.7	.1	7.5	13.2	.0	1.0	.0	1.49	.05	.00	.00	.76
14.20	.110 15.7	.1	7.5	13.2	.0	1.0	.0	1.49	.05	.00	.00	.76
13.90	.110 15.7	.1	7.5	13.1	.0	1.0	.0	1.49	.05	.00	.00	.76
13.60	.110 15.7	.1	7.5	13.1	.0	1.0	.0	1.49	.05	.00	.00	.76
13.30	.110 15.7	.1	7.5	13.0	.0	1.0	.0	1.49	.05	.00	.00	.76
13.00	.110 15.7	.1	7.5	12.9	.0	1.0	.0	1.49	.05	.00	.00	.76
12.70	.110 15.7	.1	7.6	12.9	.0	1.0	.0	1.49	.05	.00	.00	.76
12.40	.110 15.7	.1	7.6	12.8	.0	1.0	.0	1.49	.05	.00	.00	.76
12.10	.110 15.7	.1	7.6	12.8	.0	1.0	.0	1.49	.05	.00	.00	.76
11.80	.110 15.7	.1	7.6	12.7	.0	1.0	.0	1.49	.05	.00	.00	.76
11.50	.110 15.7	.1	7.6	12.7	.0	1.0	.0	1.49	.05	.00	.00	.76
11.20	.110 15.7	.1	7.6	12.6	.0	1.0	.0	1.49	.05	.00	.00	.76
10.90	.110 15.7	.1	7.6	12.5	.0	1.0	.0	1.49	.05	.00	.00	.76
10.60	.110 15.7	.1	7.6	12.5	.0	1.0	.0	1.49	.05	.00	.00	.76
10.30	.110 15.7	.1	7.6	12.4	.0	1.0	.0	1.49	.05	.00	.00	.76
10.00	.110 15.7	.1	7.6	12.4	.0	1.0	.0	1.49	.05	.00	.00	.76
9.70	.110 15.7	.1	7.7	12.3	.0	1.0	.0	1.49	.05	.00	.00	.76
9.40	.110 15.7	.1	7.7	12.3	.0	1.0	.0	1.49	.05	.00	.00	.76
9.10	.110 15.7	.1	7.7	12.2	.0	1.0	.0	1.49	.05	.00	.00	.76
8.80	.110 15.7	.1	7.7	12.2	.0	1.0	.0	1.49	.05	.00	.00	.76
8.50	.110 15.7	.1	7.7	12.1	.0	1.0	.0	1.49	.05	.00	.00	.76
8.20	.110 15.7	.1	7.7	12.1	.0	1.0	.0	1.49	.05	.00	.00	.76
7.90	.110 15.7	.1	7.7	12.0	.0	1.0	.0	1.49	.05	.00	.00	.76
7.60	.110 15.7	.1	7.7	11.9	.0	1.0	.0	1.49	.05	.00	.00	.76
7.30	.110 15.7	.1	7.7	11.9	.0	1.0	.0	1.49	.05	.00	.00	.76
7.00	.110 15.7	.1	7.7	11.7	.0	1.0	.0	1.49	.05	.00	.00	.76
6.70	.110 15.7	.1	7.5	11.3	.0	1.0	.0	1.49	.05	.00	.00	.76
6.40	.110 15.7	.1	6.6	9.8	.0	1.0	.0	1.49	.05	.00	.00	.76
6.00	.110 15.7	.1	6.2	9.2	.0	1.0	.0	.44	.07	.00	.00	.76
5.60	.110 15.7	.1	6.0	8.8	.0	1.0	.0	.44	.07	.00	.00	.76
5.20	.110 15.7	.1	5.9	8.4	.0	1.0	.0	.44	.07	.00	.00	.76
4.80	.110 15.7	.1	5.7	8.1	.0	1.0	.0	.44	.07	.00	.00	.76
4.40	.110 15.7	.1	5.7	7.8	.0	1.0	.0	.44	.07	.00	.00	.76
4.00	.110 15.7	.1	5.6	7.5	.0	1.0	.0	.44	.07	.00	.00	.76
3.60	.110 15.7	.1	5.5	7.2	.0	1.0	.0	.44	.07	.00	.00	.76
3.20	.110 15.7	.1	5.5	6.9	.0	1.0	.0	.44	.07	.00	.00	.76
2.80	.110 15.7	.1	5.4	6.7	.0	1.0	.0	.44	.07	.00	.00	.76
2.40	.110 15.7	.1	5.4	6.4	.0	1.0	.0	.44	.07	.00	.00	.76
2.00	.110 15.7	.1	5.4	6.2	.0	1.0	.0	.44	.07	.00	.00	.76
1.60	.110 15.7	.1	5.3	6.0	.0	1.0	.0	.44	.07	.00	.00	.76
1.20	.110 15.7	.1	5.3	5.8	.0	1.0	.0	.44	.07	.00	.00	.76
.80	.110 15.7	.1	5.3	5.6	.0	1.0	.0	.44	.07	.00	.00	.76

.40 .110 15.7 .1 5.3 5.4 .0 1.0 .0 .44 .07 .00 .00 .76
 .00 .110 15.7 .1 5.4 5.3 .0 1.0 .0 .44 .07 .00 .00 .76

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 CAPSULE SUMMARY
 H. COULFE TRIEF

DIST KM	FLOW CMS	TEMP DEG C	SALN PPT	DO MG/L	EIBOD MG/L	ORGH MG/L	NH3 MG/L	CHLA US/L	REFER CBOD		NH3		SOD	
									1/DA	L/DA	1/DA	L/DA	1/DA	L/DA
H1DWTR	.028	.0	8.9	9.5	.0	.0	.0	.0	2.64	.11	.22	.00	1.30	
.90	.031	15.7	.1	8.2	13.4	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.80	.031	15.7	.1	8.1	13.1	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.70	.031	15.7	.1	8.0	12.8	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.60	.031	15.7	.1	7.9	12.6	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.50	.031	15.7	.1	7.8	12.3	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.40	.031	15.7	.1	7.7	12.0	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.30	.031	15.7	.1	7.6	11.6	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.20	.031	15.7	.1	7.4	10.8	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.10	.031	15.7	.1	6.9	9.2	.0	1.0	.0	2.64	.11	.22	.00	1.30	
.00	.031	15.7	.1	5.5	5.2	.0	1.0	.0	2.64	.11	.22	.00	1.30	

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 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 1 FREE FLOWING W/CHURCH POINT
 BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I ↓	CM-II ↓	DO MG/L	BOD MG/L	EIBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
1	H1DWTR	.0283	.00	.00	.0	.0	8.90	9.65	9.65	.00	.00	.00	.00	.0	0.	7.52
18	WSTLD	.0438	.00	.00	.0	.0	6.00	46.00	46.00	.00	.00	.00	.00	.0	0.	43.00

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTY VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
1	70.20	70.00	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
2	70.00	69.80	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
3	69.80	69.60	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
4	69.60	69.40	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
5	69.40	69.20	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
6	69.20	69.00	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
7	69.00	68.80	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
8	68.80	68.60	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
9	68.60	68.40	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
10	68.40	68.20	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
11	68.20	68.00	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
12	68.00	67.80	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
13	67.80	67.60	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
14	67.60	67.40	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019

15	67.40	67.20	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
16	67.20	67.00	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
17	67.00	66.80	.0283	.0	.019	.12	.31	4.9	298.	975.7	1.5	0.	.000	1.311	.019
18	66.80	66.60	.0721	60.7	.026	.09	.37	7.5	552.	1502.5	2.8	0.	.000	2.103	.026
19	66.60	66.40	.0721	60.7	.026	.09	.37	7.5	552.	1502.5	2.8	0.	.000	2.103	.026
20	66.40	66.20	.0721	60.7	.026	.09	.37	7.5	552.	1502.5	2.8	0.	.000	2.103	.026

TOT 2.33 6718. 21093.7 1.7
 AVG .020
 CUM 2.33

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDINGS DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAI 1/DA	CBOD SETT 1/DA	AMBOD DECAI 1/DA	FULL SOD *	CORR SOD *	ORGN DECAI 1/DA	ORGH SETT 1/DA	MH3 DECAI 1/DA	NH3 SRCE *	DEHIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAI 1/DA	NCM DECAI 1/DA	NCM SETT 1/DA	
1	70.000	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
2	69.800	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
3	69.600	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
4	69.400	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
5	69.200	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
6	69.000	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
7	68.800	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
8	68.600	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
9	68.400	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
10	68.200	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
11	68.000	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
12	67.800	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
13	67.600	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
14	67.400	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
15	67.200	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
16	67.000	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
17	66.800	9.92	2.21	.11	.05	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
18	66.600	9.92	2.21	.11	.04	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
19	66.400	9.92	2.21	.11	.04	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
20	66.200	9.92	2.21	.11	.04	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.02	.02
20 DEG C RATE			.13	.00	.00	.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.68	.05	.05
AVG 20 DEG C RATE			2.41	.05	.05	.00			.00											

** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-T	CM-TI	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
1	70.000	15.70	.1	.0	.0	8.69	9.73	9.73	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.68
2	69.800	15.70	.1	.0	.0	8.56	9.78	9.78	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.80
3	69.600	15.70	.1	.0	.0	8.46	9.84	9.84	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.91
4	69.400	15.70	.1	.0	.0	8.37	9.89	9.89	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.03
5	69.200	15.70	.1	.0	.0	8.30	9.94	9.94	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.14

6	69.000	15.70	.1	.0	.0	8.25	9.99	9.99	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.26
7	68.800	15.70	.1	.0	.0	8.20	10.04	10.04	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.37
8	68.600	15.70	.1	.0	.0	8.17	10.09	10.09	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.48
9	68.400	15.70	.1	.0	.0	8.13	10.14	10.14	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.59
10	68.200	15.70	.1	.0	.0	8.11	10.19	10.19	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.70
11	68.000	15.70	.1	.0	.0	8.09	10.24	10.24	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.80
12	67.800	15.70	.1	.0	.0	8.07	10.29	10.29	.00	1.00	1.00	2.00	1.00	.0	.0	.0	8.92
13	67.600	15.70	.1	.0	.0	8.05	10.36	10.36	.00	1.00	1.00	2.00	1.00	.0	.0	.0	9.05
14	67.400	15.70	.1	.0	.0	8.03	10.50	10.50	.00	1.00	1.00	2.00	1.00	.0	.0	.0	9.25
15	67.200	15.70	.1	.0	.0	7.98	10.95	10.95	.00	1.00	1.00	2.00	1.00	.0	.0	.0	9.74
16	67.000	15.70	.1	.0	.0	7.87	12.57	12.57	.00	1.00	1.00	2.00	1.00	.0	.0	.0	11.37
17	66.800	15.70	.1	.0	.0	7.45	18.90	18.90	.00	1.00	1.00	2.00	1.00	.0	.0	.0	17.50
18	66.600	15.70	.1	.0	.0	6.71	31.52	31.52	.00	1.00	1.00	2.00	1.00	.0	.0	.0	29.53
19	66.400	15.70	.1	.0	.0	6.67	31.20	31.20	.00	1.00	1.00	2.00	1.00	.0	.0	.0	29.37
20	66.200	15.70	.1	.0	.0	6.62	30.90	30.90	.00	1.00	1.00	2.00	1.00	.0	.0	.0	29.21

* CM-I = CHLORIDES MG/L
 ** G/CU M
 * CM-II = SULFATES MG/L
 NCM - NBOD MG/L

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 2 POOLED REACH BELOW CHURCH POINT
 DAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGI MG/L	NI3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLJ #/100ML	NCM
21	UPR RCH	.0721	15.70	.14	.0	.0	6.62	30.90	30.90	.00	1.00	1.00	1.00	.0	0.	29.21

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGINN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S	
21	66.20	66.00	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	20.	.000	.000	.022	
TOT																
AVG					.022	.10	.44	7.4	649.	1475.8						
CUM					2.44						3.2					

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECY 1/DA	ANBOD DECY 1/DA	FULL SOD	CORR SOD	ORGN DECY 1/DA	ORGH DECY 1/DA	NH3 SRCE	NH3 DECY 1/DA	DERIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECY 1/DA	NCM DECY 1/DA	SETT 1/DA	
21	66.000	9.92	1.58	.11	.10	.00	1.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.04
20 DEG C RATE			.13			.00	1.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.80	.10
AVG 20 DEG C RATE			1.73	.10				.00											

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CH-1	CM-1	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
21	66.000	15.70	.1	.0	.0	6.39	30.34	30.34	.00	1.00	1.00	2.00	1.00	.0	.0	0.	28.84

* CH-1 = CHLORIDES MG/L
 ** G/CU M
 * CM-1 = SULFATES MG/L
 * CM-II = CHLORIDES MG/L
 * CH-1 = NH4+ MG/L
 * CH-2 = NH4+ MG/L

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CH-1	CH-2	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
22	UPR RCH	.0721	15.70	.14	.0	.0	6.39	30.34	30.34	.00	1.00	1.00	1.00	.0	.0	0.	28.84
80	WSTLD	.0283	.00	.00	.0	.0	8.90	4.60	4.60	.00	.00	.00	.00	.0	.0	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
22	66.00	65.80	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	40.	.000	1.900	.022
23	65.80	65.60	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	61.	.000	1.900	.022
24	65.60	65.40	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	81.	.001	1.900	.022
25	65.40	65.20	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	101.	.001	1.900	.022
26	65.20	65.00	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	121.	.001	1.900	.022
27	65.00	64.80	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	141.	.001	1.900	.022
28	64.80	64.60	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	162.	.001	1.900	.022
29	64.60	64.40	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	182.	.001	1.900	.022
30	64.40	64.20	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	202.	.001	1.900	.022
31	64.20	64.00	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	222.	.002	1.900	.022
32	64.00	63.80	.0721	60.7	.022	.10	.44	7.4	649.	1475.8	3.2	242.	.002	1.900	.022

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 FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 3 POOLED REACH TO HAZELWOOD GULLY
 BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

55	59.200	15.70	.1	.0	6.15	17.29	17.29	.00	1.00	1.00	2.00	1.00	.0	.0	18.98
56	59.000	15.70	.1	.0	6.18	17.03	17.03	.00	1.00	1.00	2.00	1.00	.0	.0	18.75
57	58.800	15.70	.1	.0	6.21	16.78	16.78	.00	1.00	1.00	2.00	1.00	.0	.0	18.52
58	58.600	15.70	.1	.0	6.23	16.53	16.53	.00	1.00	1.00	2.00	1.00	.0	.0	18.30
59	58.400	15.70	.1	.0	6.26	16.29	16.29	.00	1.00	1.00	2.00	1.00	.0	.0	18.08
60	58.200	15.70	.1	.0	6.29	16.05	16.05	.00	1.00	1.00	2.00	1.00	.0	.0	17.86
61	58.000	15.70	.1	.0	6.32	15.82	15.82	.00	1.00	1.00	2.00	1.00	.0	.0	17.64
62	57.800	15.70	.1	.0	6.35	15.60	15.60	.00	1.00	1.00	2.00	1.00	.0	.0	17.43
63	57.600	15.70	.1	.0	6.38	15.37	15.37	.00	1.00	1.00	2.00	1.00	.0	.0	17.21
64	57.400	15.70	.1	.0	6.40	15.16	15.16	.00	1.00	1.00	2.00	1.00	.0	.0	17.00
65	57.200	15.70	.1	.0	6.43	14.94	14.94	.00	1.00	1.00	2.00	1.00	.0	.0	16.80
66	57.000	15.70	.1	.0	6.46	14.73	14.73	.00	1.00	1.00	2.00	1.00	.0	.0	16.59
67	56.800	15.70	.1	.0	6.48	14.53	14.53	.00	1.00	1.00	2.00	1.00	.0	.0	16.39
68	56.600	15.70	.1	.0	6.51	14.33	14.33	.00	1.00	1.00	2.00	1.00	.0	.0	16.19
69	56.400	15.70	.1	.0	6.53	14.13	14.13	.00	1.00	1.00	2.00	1.00	.0	.0	16.00
70	56.200	15.70	.1	.0	6.56	13.94	13.94	.00	1.00	1.00	2.00	1.00	.0	.0	15.80
71	56.000	15.70	.1	.0	6.58	13.75	13.75	.00	1.00	1.00	2.00	1.00	.0	.0	15.61
72	55.800	15.70	.1	.0	6.60	13.57	13.57	.00	1.00	1.00	2.00	1.00	.0	.0	15.42
73	55.600	15.70	.1	.0	6.63	13.39	13.39	.00	1.00	1.00	2.00	1.00	.0	.0	15.23
74	55.400	15.70	.1	.0	6.65	13.21	13.21	.00	1.00	1.00	2.00	1.00	.0	.0	15.04
75	55.200	15.70	.1	.0	6.67	13.04	13.04	.00	1.00	1.00	2.00	1.00	.0	.0	14.86
76	55.000	15.70	.1	.0	6.70	12.85	12.85	.00	1.00	1.00	2.00	1.00	.0	.0	14.66
77	54.800	15.70	.1	.0	6.73	12.64	12.64	.00	1.00	1.00	2.00	1.00	.0	.0	14.44
78	54.600	15.70	.1	.0	6.77	12.32	12.32	.00	1.00	1.00	2.00	1.00	.0	.0	14.11
79	54.400	15.70	.1	.0	6.88	11.62	11.62	.00	1.00	1.00	2.00	1.00	.0	.0	13.43
80	54.200	15.70	.1	.0	7.19	9.63	9.63	.00	1.00	1.00	2.00	1.00	.0	.0	11.52

* CM-I = CHLORIDES MG/L
 ** G/CU M NCM = NPOD MG/L
 CM-II = SULFATES MG/L

FINAL REPORT B. PLAQUEMINE BRULE.
 REACH NO. 4 HAZELWOOD GULLY TO COLES GULLY BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****																
ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-1 *	CM-II *	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCH
81	UPR RCH	.1004	15.70	.14	.0	.0	7.19	9.63	9.63	.00	1.00	1.00	1.00	.0	0.	11.52
94	WSTLD	.0283	.00	.00	.0	.0	8.90	4.60	4.60	.00	.00	.00	.00	.0	0.	6.90
***** HYDRAULIC PARAMETER VALUES *****																
ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S		
81	54.20	53.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	.003	4.000	.010		
82	53.20	52.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	.004	4.000	.010		
83	52.20	51.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	.005	4.000	.010		
84	51.20	50.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	.006	4.000	.010		
85	50.20	49.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	.006	4.000	.010		

86	49.20	48.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	3345.	.007	4.000	.010
87	48.20	47.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	3701.	.008	4.000	.011
88	47.20	46.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	4057.	.009	4.000	.012
89	46.20	45.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	4412.	.010	4.000	.012
90	45.20	44.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	4768.	.010	4.000	.012
91	44.20	43.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	5124.	.011	4.000	.013
92	43.20	42.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	5479.	.012	4.000	.013
93	42.20	41.20	.1004	71.8	.010	1.19	.86	12.0	10320.	11999.9	10.3	5835.	.013	4.000	.014
94	41.20	40.20	.1288	78.0	.012	.93	.86	12.0	10320.	11999.9	10.3	6191.	.013	4.000	.016

TOT 16.39 144479. 167998.7
 AVG .010 10.3
 CUM 24.95

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	EMDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECA 1/DA	CMOD SETT 1/DA	MBOD DECA 1/DA	FULL. SOD *	CORR SOD *	ORGI DECA 1/DA	ORGH SETT 1/DA	HH3 DECA 1/DA	HH3 SRCE *	DEHIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/DA	NCM DECA 1/DA	NCM SETT 1/DA	
81	53.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
82	52.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
83	51.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
84	50.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
85	49.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
86	48.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
87	47.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
88	46.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
89	45.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
90	44.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
91	43.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
92	42.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
93	41.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09
94	40.200	9.92	.75	.11	.10	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.09	.09

20 DEG C RATE .13 .10
 AVG 20 DEG C RATE .82
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PET	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	HH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
81	53.200	15.70	.1	.0	.0	6.91	8.68	8.68	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.65
82	52.200	15.70	.1	.0	.0	6.81	7.81	7.81	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.81
83	51.200	15.70	.1	.0	.0	6.83	7.11	7.11	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.10
84	50.200	15.70	.1	.0	.0	6.90	6.53	6.53	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.50
85	49.200	15.70	.1	.0	.0	6.99	6.07	6.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.99
96	48.200	15.70	.1	.0	.0	7.08	5.69	5.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.56
87	47.200	15.70	.1	.0	.0	7.16	5.38	5.38	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.20
88	46.200	15.70	.1	.0	.0	7.24	5.12	5.12	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.89

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FULL SOD	CORR SOD	ORGN DECY 1/DA	ORGN SETT 1/DA	NH3 DECY 1/DA	NH3 SRCE	DENIT RATE 1/DA	PO4 SRCE	AI.G PROD	MAC PROD	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA	
141	30.850	9.93	.34	.10	.08	.00	.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14
142	30.300	9.93	.34	.10	.08	.00	.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14
20 DEG C RATE			.12	.00	.08		.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.59	.08
AVG 20 DEG C RATE			.37	.08	.08		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		

** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	RH3 MG/L	HO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHI. A UG/L	MACRO	COLI #/100ML	NCM
141	30.850	15.70	.1	.0	.0	6.94	6.08	6.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.97
142	30.300	15.70	.1	.0	.0	6.85	6.07	6.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.97

* CM-I = CHLORIDES MG/L

* CM-II = SULFATES MG/L

** G/GU M

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FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 13 BAYOU WIKOFF TO CROWLEY HIGH G.

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CH-I	CH-II	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	NH3 MG/L	HO3+2 MG/L	PHOS MG/L	CHI. A UG/L	MACRO	COLI #/100ML	NCM
205	UPR RCH	.1879	15.70	.11	.0	.0	6.85	6.07	6.07	.00	1.00	1.00	1.00	.0	.0	0.	5.97
205	TRIB	.0892	15.70	.11	.0	.0	7.30	5.53	5.53	.00	1.00	1.00	1.00	.0	.0	0.	5.25

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN	MEAN VELO M/S
205	30.30	29.50	.2762	79.5	.003	2.94	2.50	35.1	70175.	28070.2	97.7	18557.	.005	6.000	.005
206	29.50	28.70	.2762	79.5	.003	2.94	2.50	35.1	70175.	28070.2	87.7	19816.	.005	6.000	.005
207	28.70	27.90	.2762	79.5	.003	2.94	2.50	35.1	70175.	28070.2	87.7	21074.	.005	6.000	.006
208	27.90	27.10	.2762	79.5	.003	2.94	2.50	35.1	70175.	28070.2	87.7	22333.	.006	6.000	.006
TOT						11.76			280702.	112280.7					
AVG				.003			2.50	35.1							87.7
CUM															

TOT 11.76 280702. 112280.7 87.7
 AVG .003 2.50 35.1 87.7
 CUM 85.85

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECY 1/DA	ANBOD DECY 1/DA	FULL SOD 1/DA	CORR SOD	ORGN DECY 1/DA	ORGN SETT 1/DA	NH3 DECY 1/DA	NH3 SRCE	DEHIT RATE 1/DA	PO4 SRCE	ALG PROD	MAC PROD	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA
205	29.500	9.93	.25	.10	.08	.38	.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.13
206	28.700	9.93	.25	.10	.08	.38	.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.13
207	27.900	9.93	.25	.10	.08	.38	.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.13
208	27.100	9.93	.25	.10	.08	.38	.38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.13
20 DFG C RATE:			.12	.00	.08	.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.05	.05
AVG 20 DEG C RATE			.27	.08	.08	.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.05	.05

* G/SQ M/D
** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
205	29.500	15.70	.1	.0	.0	6.78	5.93	5.93	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.99
206	28.700	15.70	.1	.0	.0	6.54	6.00	6.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.40
207	27.900	15.70	.1	.0	.0	6.34	6.08	6.08	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.93
208	27.100	15.70	.1	.0	.0	6.19	6.16	6.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.73

* CM-I = CHLORIDES MG/L
* CM-II = SULFATES MG/L
* CM-I = CHLORIDES NCM = NBOD MG/L
** G/CU M

FINAL REPORT B. PLAQUEMINE BRULE
REACH NO. 15 CROWLEY HIGH GULLY TO ROLLER C.
WINTER PROTECTION RUI

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
228	UPR RCH	.2762	15.70	.10	.0	.0	6.19	6.16	6.16	.00	1.00	1.00	1.00	.0	.0	0.	7.73
228	TRIB	.0013	15.70	.10	.0	.0	6.16	6.21	6.21	.00	1.00	1.00	1.00	.0	.0	0.	8.61
247	WSTLD	.1353	.00	.00	.0	.0	2.00	23.00	23.00	.00	.00	.00	.00	.0	.0	0.	21.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFT	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
228	27.10	26.90	.2775	79.6	.003	.81	2.83	34.3	19417.	6861.3	97.1	22683.	.005	6.900	.006
229	26.90	26.70	.2775	79.6	.003	.81	2.83	34.3	19417.	6861.3	97.1	23032.	.005	6.900	.006
230	26.70	26.50	.2775	79.6	.003	.81	2.83	34.3	19417.	6861.3	97.1	23381.	.005	6.900	.006
231	26.50	26.30	.2775	79.6	.003	.81	2.83	34.3	19417.	6861.3	97.1	23731.	.005	6.900	.006

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECY 1/DA	ANBOD DECY 1/DA	FULL SOD *	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 DECY 1/DA	NH3 SRCE *	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA
255	21.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
256	21.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
257	21.100	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
258	20.900	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
259	20.700	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
260	20.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
261	20.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
262	20.100	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
263	19.900	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
264	19.700	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
265	19.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
266	19.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
267	19.100	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
268	18.900	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
269	18.700	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
270	18.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
271	18.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
272	18.100	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
273	17.900	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
274	17.700	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
275	17.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
276	17.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
277	17.100	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
278	16.900	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
279	16.700	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
280	16.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
281	16.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
282	16.100	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
283	15.900	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
284	15.700	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
285	15.500	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
286	15.300	9.93	.22	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
20 DEG C RATE			.12			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	11.37	.00
AVG 20 DEG C RATE			.24		.05				.00								

* G/SQ M/D

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
255	21.500	15.70	.1	.0	.0	5.00	7.41	7.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.33
256	21.300	15.70	.1	.0	.0	5.02	7.28	7.28	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.40
257	21.100	15.70	.1	.0	.0	5.05	7.16	7.16	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.46
258	20.900	15.70	.1	.0	.0	5.07	7.05	7.05	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.52
259	20.700	15.70	.1	.0	.0	5.09	6.95	6.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.58

ELEM NO.	BEGN DIST KM	ENDNG DIST KM	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
260	20.500	15.70	.1		.0	5.12	6.84	6.84	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.64
261	20.300	15.70	.1		.0	5.14	6.75	6.75	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.69
262	20.100	15.70	.1		.0	5.16	6.66	6.66	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.75
263	19.900	15.70	.1		.0	5.19	6.57	6.57	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.79
264	19.700	15.70	.1		.0	5.21	6.49	6.49	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.84
265	19.500	15.70	.1		.0	5.24	6.42	6.42	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.88
266	19.300	15.70	.1		.0	5.26	6.34	6.34	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.92
267	19.100	15.70	.1		.0	5.28	6.27	6.27	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.96
268	18.900	15.70	.1		.0	5.31	6.21	6.21	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.99
269	18.700	15.70	.1		.0	5.33	6.15	6.15	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.01
270	18.500	15.70	.1		.0	5.35	6.09	6.09	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.03
271	18.300	15.70	.1		.0	5.37	6.03	6.03	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.05
272	18.100	15.70	.1		.0	5.39	5.97	5.97	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.06
273	17.900	15.70	.1		.0	5.41	5.92	5.92	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.06
274	17.700	15.70	.1		.0	5.43	5.87	5.87	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.05
275	17.500	15.70	.1		.0	5.45	5.82	5.82	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.03
276	17.300	15.70	.1		.0	5.46	5.77	5.77	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	16.00
277	17.100	15.70	.1		.0	5.48	5.72	5.72	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.97
278	16.900	15.70	.1		.0	5.49	5.68	5.68	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.92
279	16.700	15.70	.1		.0	5.50	5.63	5.63	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.86
280	16.500	15.70	.1		.0	5.50	5.58	5.58	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.86
281	16.300	15.70	.1		.0	5.51	5.53	5.53	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.79
282	16.100	15.70	.1		.0	5.51	5.48	5.48	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.70
283	15.900	15.70	.1		.0	5.50	5.43	5.43	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.60
284	15.700	15.70	.1		.0	5.49	5.38	5.38	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.48
285	15.500	15.70	.1		.0	5.47	5.32	5.32	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.34
286	15.300	15.70	.1		.0	5.45	5.26	5.26	.00	1.00	1.00	2.00	1.00	1.00	.0	0.	15.18

* CM-I = CHLORIDES MG/L
 ** G/CU M
 * CM-II = SULFATES MG/L
 NCM - NBOD MG/L

FINAL REPORT B. PLAQUEMINE BRULE
 REACH NO. 22 BAYOU BLANC TO H. COULEE TRIEF
 BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	UPR RCH	TRIB	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
390	UPR RCH		.4127	15.70	.10	.0	.0	5.45	5.26	5.26	.00	1.00	1.00	1.00	.0	0.	15.18
390	TRIB		.1105	15.70	.10	.0	.0	5.37	5.26	5.26	.00	1.00	1.00	1.00	.0	0.	14.54

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGN DIST KM	ENDNG DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
390	15.30	15.20	.5232	83.8	.003	.40	3.57	50.0	17857.	5002.0	178.6	54748.	.007	8.000	.007
391	15.20	15.10	.5232	83.8	.003	.40	3.57	50.0	17857.	5002.0	178.6	55045.	.007	8.000	.007
392	15.10	15.00	.5232	83.8	.003	.40	3.57	50.0	17857.	5002.0	178.6	55341.	.007	8.000	.007
393	15.00	14.90	.5232	83.8	.003	.40	3.57	50.0	17857.	5002.0	178.6	55638.	.007	8.000	.007

429	12.300	15.70	.1	.0	5.26	4.44	4.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.46
430	12.200	15.70	.1	.0	5.24	4.42	4.42	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.37
431	12.100	15.70	.1	.0	5.22	4.39	4.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.27
432	12.000	15.70	.1	.0	5.20	4.37	4.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.16

* CM-I = CHLORIDES MG/L
 ** G/GU M
 CM-I = SULFATES MG/L
 NCM = NBOD MG/L

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 FINAL REPORT B. PLAQUEMINE BRUIE WATERSHED
 REACH NO. 25 ABOVE BAYOU JONAS WINT'R PROJECTION RUN

***** REACH INPUTS *****																
ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	IH3 MG/L	NO312 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
433	UPR RCH	.5537	15.70	.10	.0	.0	5.20	4.37	4.37	.00	1.00	1.00	1.00	.0	0.	14.16
438	WSTLD	.0283	.00	.00	.0	.0	8.90	4.60	4.60	.00	.00	.00	.00	.0	0.	6.80

***** HYDRAULIC PARAMETER VALUES *****															
ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCY EFF	ADVCTY VFLO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	%-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
433	12.00	11.00	.5537	79.5	.002	5.97	4.50	63.5	285714.	63492.1	285.7	68665.	.005	9.300	.005
434	11.00	10.00	.5537	79.5	.002	5.97	4.50	63.5	285714.	63492.1	285.7	73056.	.006	9.300	.006
435	10.00	9.00	.5537	79.5	.002	5.97	4.50	63.5	285714.	63492.1	285.7	77447.	.006	9.300	.006
436	9.00	8.00	.5537	79.5	.002	5.97	4.50	63.5	285714.	63492.1	285.7	81839.	.006	9.300	.006
437	8.00	7.00	.5537	79.5	.002	5.97	4.50	63.5	285714.	63492.1	285.7	86230.	.007	9.300	.007
438	7.00	6.00	.5821	80.5	.002	5.68	4.50	63.5	285714.	63492.1	285.7	90621.	.007	9.300	.007

TOT AVG CUM
 .002 173.34 360952.3 285.7
 1714286.

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELF#M NO.	ENDING DIST	SAT D.O. MG/L	REAR RATE 1/DA	CBOD DECY 1/DA	CHOD SETT 1/DA	AMBOD DECY 1/DA	FULL SOD	CORR SOD	ORGN DECY 1/DA	ORGH DECY 1/DA	NH3 DECY 1/DA	MH3 SRCE	DNIT RATE 1/DA	PO4 SRCE	ALG PROD	MAC PROD	COLI DECY 1/DA	NCM DECY 1/DA	NCM SETT 1/DA	
433	11.000	9.93	.14	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
434	10.000	9.93	.14	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
435	9.000	9.93	.14	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
436	8.000	9.93	.14	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
437	7.000	9.93	.14	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
438	6.000	9.93	.14	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20 DEG C RATE			.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AVG 20 DEG C RATE			.15	.05					.00				.00	.00			.00	.00		27.40
* G/SQ M/D																				

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NH3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	IICH *
433	11.000	15.70	.1	.0	.0	5.12	4.30	4.30	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.81
434	10.000	15.70	.1	.0	.0	5.05	4.23	4.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	13.30
435	9.000	15.70	.1	.0	.0	5.03	4.21	4.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.84
436	8.000	15.70	.1	.0	.0	5.04	4.23	4.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.43
437	7.000	15.70	.1	.0	.0	5.08	4.31	4.31	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.05
438	6.000	15.70	.1	.0	.0	5.17	4.49	4.49	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.72

* CH-I = CHLORIDES MG/L
 * CH-II = SULFATES MG/L
 ** G/CU M
 NCH = NHOD MG/L

FINAL REPORT B. PLAQUEMINE BRUISE BAYOU PLAQUEMINE BRUISE WATERSHED REACH NO. 26 BAYOU JONAS TO BAYOU DES CANNIES WINTER PROJECTION RUN

***** REACH INPUTS *****

ELF#M NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	EROD MG/L	ORGH MG/L	NH3 MG/L	NH3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM
439	UPR KCH	.5821	15.70	.10	.0	.0	5.17	4.49	4.49	.00	4.49	.00	1.00	1.00	1.00	.0	.0	0.	11.72

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPASH SQ M/S	MEAN VELO M/S
439	6.00	5.00	.5821	80.5	.003	3.92	3.71	51.8	192308.	51835.0	192.3	94560.	.011	10.200	.011
440	5.00	4.00	.5821	80.5	.003	3.82	3.71	51.8	192308.	51835.0	192.3	94500.	.011	10.200	.012

441	4.00	3.00	.5821	80.5	.003	3.82	3.71	51.8	192308.	51835.0	192.3	102439.	.012	10.200	.012
442	3.00	2.00	.5821	80.5	.003	3.82	3.71	51.8	192308.	51835.0	192.3	106379.	.012	10.200	.012
443	2.00	1.00	.5821	80.5	.003	3.82	3.71	51.8	192308.	51835.0	192.3	110318.	.013	10.200	.013
444	1.00	.00	.5821	80.5	.003	3.82	3.71	51.8	192308.	51835.0	192.3	114257.	.013	10.200	.013

TOT 22.94 1153846. 311009.8
 AVG .003 3.71 51.8 192.3
 CUM 196.78

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	LOADING DIST	SAT D.O. MG/L	REAER RATE L/DA	CBOD DECAY L/DA	CBOD SETT L/DA	ANBOD DECAY L/DA	FUEL SOD *	CORR SOD *	ORGH DECA L/DA	ORGH SETT L/DA	ORGH DECA L/DA	FO4 SRCE	DENIT RATE 1/DA	NH3 DECA L/DA	NH3 SRCE	MAC PROD **	ALG PROD **	PHOS	FO4	COLI PROD 1/DA	MACRO PROD **	COLI DECAY 1/DA	NCM SETT 1/DA	
439	5.000	10.04	.16	.10	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
440	4.000	10.16	.16	.09	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
441	3.000	10.29	.16	.09	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
442	2.000	10.41	.16	.09	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
443	1.000	10.54	.15	.09	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
444	.000	10.67	.15	.08	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00

20 DEG C RATE .18
 AVG 20 DEG C RATE .05
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUTEUT VALUES *****

ELEM NO.	LOADING DIST	TEMP DEG C	SALIN PPT	CH-I *	CH-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	ORGH MG/L	NIH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
439	5.000	15.11	.2	.0	.0	5.32	4.84	4.84	.00	.00	.83	.83	1.67	.83	.0	.0	0.	11.44
440	4.000	14.53	.4	.0	.0	5.47	5.18	5.18	.00	.00	.67	.67	1.33	.67	.0	.0	0.	11.01
441	3.000	13.94	.5	.0	.0	5.63	5.49	5.49	.00	.00	.50	.50	1.00	.50	.0	.0	0.	10.42
442	2.000	13.35	.6	.0	.0	5.79	5.78	5.78	.00	.00	.33	.33	.67	.33	.0	.0	0.	9.60
443	1.000	12.77	.8	.0	.0	5.97	6.09	6.09	.00	.00	.17	.17	.33	.17	.0	.0	0.	8.45
444	.000	12.18	.9	.0	.0	6.17	6.44	6.44	.00	.00	.00	.00	.00	.00	.0	.0	0.	6.84

* CH-I = CHLORIDES MG/L
 * CH-II = SULFATES MG/L
 ** G/CU M
 NCM - IBOD MG/L

1
 STREAM SUMMARY
 B. PLAQUEMINE BRULE
 WINTER PROJECTION RUN

TRAVEL TIME = 196.3 DAYS
 MAXIMUM EFFLUENT = 86.3 PERCENT
 FLOW = .0283 TO .5821 CMS
 DISPERSION = .0000 TO 10.2000 SQ M/S

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	UNDIRG DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	ANBOD DECAY 1/DA	FULL SOD *	CORR SOD *	ORGM DECAT 1/DA	ORGN SETT 1/DA	NH3 DECAT 1/DA	NH3 SRCE *	DEIT RATE 1/DA	FO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA	
105	3.500	9.92	2.45	.11	.22	1.22	1.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05
106	3.400	9.92	2.45	.11	.22	1.22	1.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.05
20 DEG C RATE			.13	.00	.00	1.60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.37	.22
AVG 20 DEG C RATE			2.68	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

FILEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH312 MG/L	TOTN MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
105	3.500	15.70	.1	.0	.0	5.27	43.18	43.18	.00	1.00	1.00	2.00	1.00	.0	.0	0.	42.94
106	3.400	15.70	.1	.0	.0	7.17	19.52	19.52	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.35

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

1
 FINAL REPORT ATWOOD GULLY
 REACH NO. 8 ATWOOD BAYOU TO BPB
 BAYOU PLAQUEMINE BRULF WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****

FILEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CH-I *	CH-II *	DO MG/L	EBOD MG/L	IBOD MG/L	ORGH MG/L	NH3 MG/L	NH312 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
107	UPR RCH	.0025	15.70	.14	.0	.0	7.17	19.52	19.52	.00	1.00	1.00	1.00	.0	0.	15.35
107	WSTLD	.0283	.00	.00	.0	.0	8.90	9.50	9.50	.00	.00	.00	.00	.0	0.	1.70

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BCGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
107	3.40	3.30	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
108	3.30	3.20	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
109	3.20	3.10	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
110	3.10	3.00	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
111	3.00	2.90	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
112	2.90	2.80	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
113	2.80	2.70	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
114	2.70	2.60	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008
115	2.60	2.50	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	AMBOD DECAY 1/DA	FULL SOD	CORR SOD	ORGN DECA 1/DA	ORGH SETT 1/DA	NIH3 DECA 1/DA	NIH3 SRCK	DEHIT RATE 1/DA	POA SRCK	ALG PROD	MAC PROD	COLI DECA 1/DA	NCM DECA 1/DA	NCM SETT 1/DA	
116	2.50	2.40	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
117	2.40	2.30	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
118	2.20	2.20	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
119	2.10	2.00	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
120	2.00	1.90	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
121	1.90	1.80	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
122	1.80	1.70	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
123	1.70	1.60	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
124	1.60	1.50	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
125	1.50	1.40	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
126	1.40	1.30	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
127	1.30	1.20	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
128	1.20	1.10	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
129	1.10	1.00	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
130	1.00	.90	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
131	.90	.80	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
132	.80	.70	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
133	.70	.60	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
134	.60	.50	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
135	.50	.40	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
136	.40	.30	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
137	.30	.20	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
138	.20	.10	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
139	.10	.00	.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
140	.00		.0309	100.0	.008	.14	.31	12.4	380.	1236.6	3.8	0.	.000	.563	.008					
TOT			4.85		.008		.31	12.4	12916.	42043.5	3.8									
AVG																				
CUM																				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

134	.600	15.70	.1	.0	8.06	7.39	7.39	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.48
135	.500	15.70	.1	.0	8.06	7.27	7.27	.00	1.00	2.00	2.00	1.00	.0	.0	0.	5.46
136	.400	15.70	.1	.0	8.06	7.13	7.13	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.45
137	.300	15.70	.1	.0	8.04	6.99	6.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.45
138	.200	15.70	.1	.0	7.97	6.82	6.82	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.48
139	.100	15.70	.1	.0	7.73	6.56	6.56	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.58
140	.000	15.70	.1	.0	6.96	6.09	6.09	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.86

* CM-I = CHLORIDES MG/L
 * CM-II = SULFATES MG/L
 * CM-I = NCM MG/L
 ** G/CU M

1
 STREAM SUMMARY
 ATWOOD GULLY
 BAYOU PLAQUEMINE BRULI WATERSHED
 WINTER PROJECTION RUN

TRAVEL TIME = 6.6 DAYS
 MAXIMUM EFFLUENT = 100.0 PERCENT

FLOW	=	.0025 TO .0309	CMS
DISPERSION	=	.0763 TO .5630	SQ M/S
VELOCITY	=	.0013 TO .0081	M/S
DEPTH	=	.25 TO .31	M
WIDTH	=	7.8 TO 12.4	M
BOD DECAY	=	.11 TO .11	PER DAY
NH3 DECAY	=	.00 TO .00	PER DAY
SDAHT OXYGEN DMFD	=	.76 TO 1.22	G/SQ M/D
NH3 SOURCE	=	.00 TO .00	G/SQ M/D
REAIRATION	=	2.07 TO 2.45	PER DAY
BOD SETTLING	=	.09 TO .22	PCR DAY
ORGN DECAY	=	.00 TO .00	PER DAY
ORGN SETTLING	=	.00 TO .00	PER DAY
TEMPERATURE	=	15.70 TO 15.70	DEG C
DISSOLVED OXYGEN	=	5.22 TO 8.20	MG/L

1
 FINAL REPORT
 SILLIS GULLY
 REACH NO. 10 SILLIS GULLY

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
143	HDWTR	.0283	.00	.00	.0	.0	8.90	9.49	9.49	.00	.00	.00	.00	.0	0.	1.73
143	WSTLD	.0014	.00	.00	.0	.0	2.00	69.00	69.00	.00	.00	.00	.00	.0	0.	64.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT FFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
143	16.10	16.00	.0297	4.6	.020	.06	.26	5.8	151.	575.7	1.5	0.	.000	1.195	.020
144	16.00	15.90	.0297	4.6	.020	.06	.26	5.8	151.	575.7	1.5	0.	.000	1.195	.020
145	15.90	15.80	.0297	4.6	.020	.06	.26	5.8	151.	575.7	1.5	0.	.000	1.195	.020
146	15.80	15.70	.0297	4.6	.020	.06	.26	5.8	151.	575.7	1.5	0.	.000	1.195	.020
TOT AVG CUM			.020			.24	.26	5.8	605.	2302.7	1.5				

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST KM	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	ANBOD DECAY 1/DA	FUJL SOD 1/DA	CORR SOD 1/DA	EROD SOD 1/DA	EPD SOD 1/DA	BOD MG/L	DO MG/L	CM-II MG/L	CM-I MG/L	SALJ PPT	TEMP DEG C
143	16.000	9.92	2.65	.11	.23	.00	1.22	1.22	.00	.00	11.86	8.39	.0	.0	.1	15.70
144	15.900	9.92	2.65	.11	.23	.00	1.22	1.22	.00	.00	11.61	8.29	.0	.0	.1	15.70
145	15.800	9.92	2.65	.11	.23	.00	1.22	1.22	.00	.00	11.30	8.23	.0	.0	.1	15.70
146	15.700	9.92	2.65	.11	.23	.00	1.22	1.22	.00	.00	10.87	8.25	.0	.0	.1	15.70
20 DEG C RATE			.13		.23	.00	1.60	.00	.00	.00						
AVG 20 DEG C RATE			2.89		.23											

* G/SQ M/D
** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST KM	TEMP DEG C	SALJ PPT	CM-I MG/L	CM-II MG/L	DO MG/L	BOD MG/L	EPD MG/L	EROD MG/L	ORGN MG/L	RH3 MG/L	NO3+2 MG/L	TOTH MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM	HCH
143	16.000	15.70	.1	.0	.0	8.39	11.86	11.86	.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.55	
144	15.900	15.70	.1	.0	.0	8.29	11.61	11.61	.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.45	
145	15.800	15.70	.1	.0	.0	8.23	11.30	11.30	.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	4.28	
146	15.700	15.70	.1	.0	.0	8.25	10.87	10.87	.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.97	

* CM-I = CHLORIDES MG/L
* CM-II = SULFATES MG/L
NCM = NBOD MG/L
** G/CU M

FINAL REPORT SILLS GULLY
REACH NO. 11 SILLS BAYOU

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-J *	CM-II *	DO MG/L	BOD MG/L	ESOD MG/L	ORGH MG/L	IH3 MG/L	NO3+2 MS/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *
147	UPR RCH	.0297	15.70	.14	.0	.0	8.25	10.87	10.87	.00	1.00	1.00	1.00	.0	0.	3.87
147	WSTLD	.0283	.00	.00	.0	.0	8.90	9.50	9.50	.00	.00	.00	.00	.0	0.	1.70
150	WSTLD	.0019	.00	.00	.0	.0	2.00	69.00	69.00	.00	.00	.00	.00	.0	0.	64.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDIN DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
147	15.70	15.60	.0580	51.2	.030	.04	.29	6.7	191.	665.9	1.9	0.	.000	1.989	.030
148	15.60	15.50	.0580	51.2	.030	.04	.29	6.7	191.	665.9	1.9	0.	.000	1.989	.030
149	15.50	15.40	.0580	51.2	.030	.04	.29	6.7	191.	665.9	1.9	0.	.000	1.989	.030
150	15.40	15.30	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
151	15.30	15.20	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
152	15.20	15.10	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
153	15.10	15.00	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
154	15.00	14.90	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
155	14.90	14.80	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
156	14.80	14.70	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
157	14.70	14.60	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
158	14.60	14.50	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
159	14.50	14.40	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
160	14.40	14.30	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
161	14.30	14.20	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
162	14.20	14.10	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
163	14.10	14.00	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
164	14.00	13.90	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
165	13.90	13.80	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
166	13.80	13.70	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
167	13.70	13.60	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
168	13.60	13.50	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
169	13.50	13.40	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
170	13.40	13.30	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
171	13.30	13.20	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
172	13.20	13.10	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
173	13.10	13.00	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
174	13.00	12.90	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
175	12.90	12.80	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
176	12.80	12.70	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
177	12.70	12.60	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
178	12.60	12.50	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
179	12.50	12.40	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031
180	12.40	12.30	.0599	52.7	.031	.04	.29	6.8	195.	676.4	1.9	0.	.000	2.020	.031

ELEM NO.	TYPE	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	TEMP DEG C	SALN PPT	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
173	13.000	15.70	.1	.0	7.71	8.85	8.85	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.32
174	12.900	15.70	.1	.0	7.71	8.74	8.74	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.29
175	12.800	15.70	.1	.0	7.71	8.64	8.64	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.26
176	12.700	15.70	.1	.0	7.71	8.53	8.53	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.24
177	12.600	15.70	.1	.0	7.71	8.43	8.43	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.21
178	12.500	15.70	.1	.0	7.72	8.33	8.33	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.19
179	12.400	15.70	.1	.0	7.72	8.23	8.23	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.16
180	12.300	15.70	.1	.0	7.72	8.13	8.13	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.14
181	12.200	15.70	.1	.0	7.72	8.03	8.03	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.11
182	12.100	15.70	.1	.0	7.72	7.94	7.94	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.09
183	12.000	15.70	.1	.0	7.73	7.84	7.84	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.06
184	11.900	15.70	.1	.0	7.73	7.75	7.75	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.04
185	11.800	15.70	.1	.0	7.73	7.65	7.65	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	4.02
186	11.700	15.70	.1	.0	7.74	7.56	7.56	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.99
187	11.600	15.70	.1	.0	7.74	7.47	7.47	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.97
188	11.500	15.70	.1	.0	7.74	7.38	7.38	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.94
189	11.400	15.70	.1	.0	7.75	7.30	7.30	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.92
190	11.300	15.70	.1	.0	7.75	7.21	7.21	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.89
191	11.200	15.70	.1	.0	7.76	7.13	7.13	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.86
192	11.100	15.70	.1	.0	7.78	7.07	7.07	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.81
193	11.000	15.70	.1	.0	7.82	7.05	7.05	.00	1.00	1.00	2.00	2.00	1.00	.0	.0	0.	3.73

* CM-I = CHLORIDES MG/L
 ** G/CU M
 * CM-II = SULFATES MG/L
 NCH = NBOD MG/L

1
 FINAL REPORT SILLS SULLY BAYOU WIKOFF TO BPB
 REACH NO. 12 BAYOU WIKOFF TO BPB
 BAYOU PLAQUEMINNE BRULE WATERSHED
 WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALN PPT	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSH SQ M/S	MEAN VELO M/S
194	UPR RCH	.0599	15.70	.11	.0	.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
194	WSTLD	.0283	.00	.00	.0	.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
196						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
197						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
198						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
199						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
200						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
201						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
202						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044
203						.26	.28	7.1	2016.	7104.7	2.0	0.	.000	2.840	.044

***** HYDRAULIC PARAMETER VALUES *****

204 1.00 .00 .0882 67.9 .044 .26 .28 7.1 2016. 7104.7 2.0 .000 2.840 .044

TOT 2.91 78151.6

AVG .044 7.1

CUM 4.91 2.0

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	LOADING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAT 1/DA	CIROD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOD	CORR SOD	ORGN DECAT 1/DA	ORGN SETT 1/DA	HH3 SRCE	HH3 DECAT 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA	
194	10.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
195	9.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
196	8.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
197	7.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
198	6.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
199	5.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
200	4.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
201	3.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
202	2.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
203	1.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
204	.000	9.93	2.80	.11	.14	.00	.84	.84	.00	.00	.00	.00	.00	.00	.00	.00	.10	.04	
20 DEG C RATE				.13	.14	.00	1.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.92	.14	
AVG 20 DEG C RATE			3.06																

* G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EROD MG/L	ORGN MG/L	HH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A US/L	MACRO **	COLI #/100ML	NCM *
194	10.000	15.70	.1	.0	.0	8.28	7.30	7.30	.00	1.00	1.00	2.00	1.00	.0	.0	0.	3.04
195	9.000	15.70	.1	.0	.0	8.38	6.85	6.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.93
196	8.000	15.70	.1	.0	.0	8.44	6.43	6.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.83
197	7.000	15.70	.1	.0	.0	8.48	6.04	6.04	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.73
198	6.000	15.70	.1	.0	.0	8.52	5.67	5.67	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.64
199	5.000	15.70	.1	.0	.0	8.54	5.32	5.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.54
200	4.000	15.70	.1	.0	.0	8.57	4.99	4.99	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.46
201	3.000	15.70	.1	.0	.0	8.58	4.69	4.69	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.37
202	2.000	15.70	.1	.0	.0	8.60	4.41	4.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.30
203	1.000	15.70	.1	.0	.0	8.56	4.23	4.23	.00	1.00	1.00	2.00	1.00	.0	.0	0.	2.39
204	.000	15.70	.1	.0	.0	7.30	5.53	5.53	.00	1.00	1.00	2.00	1.00	.0	.0	0.	5.25

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = NBOD MG/L

** G/CU M

1 STREAM SUMMARY
SILLS GULLY

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

TRAVEL TIME = 4.9 DAYS
MAXIMUM EFFLUENT = 67.9 PERCENT

FLOW = .0297 TO .0882 CMS
DISPERSION = 1.1950 TO 2.8399 SQ M/S
VELOCITY = .0196 TO .0438 M/S
DEPTH = .26 TO .29 M
WIDTH = 5.8 TO 7.1 M
BOD DECAY = .11 TO .11 PER DAY
NH3 DECAY = .00 TO .00 PER DAY
SDMNT OXYGEN DEMD = .84 TO 1.22 G/SQ M/D
NH3 SOURCE = .00 TO .00 G/SQ M/D
REARERATION = 2.52 TO 2.80 PER DAY
BOD SETTLING = .14 TO .23 PER DAY
ORGN DECAY = .00 TO .00 PER DAY
ORGN SETTLING = .00 TO .00 PER DAY

TEMPERATURE = 15.70 TO 15.70 DEG C
DISSOLVED OXYGEN = 7.30 TO 8.60 MG/L

1 FINAL REPORT CROWLEY HIGH GULLY
REACH NO. 14 CROWLEY HIGH TO BPB

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-1	CM-11	DO MG/L	BOD MG/L	FIBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM
209	HDWTR	.0000	.00	.00	.0	.0	8.90	4.63	4.63	.00	.00	.00	.00	.0	0.	6.80
209	WSTLD	.0013	.00	.00	.0	.0	6.00	69.00	69.00	.00	.00	.00	.00	.0	0.	64.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADYCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
209	1.90	1.80	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
210	1.80	1.70	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
211	1.70	1.60	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
212	1.60	1.50	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
213	1.50	1.40	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
214	1.40	1.30	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
215	1.30	1.20	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
216	1.20	1.10	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002
217	1.10	1.00	.0013	100.0	.002	.64	.22	3.4	73.	338.3	.7	0.	.000	.093	.002

211	1.600	15.70	.1	.0	.0	5.58	36.36	36.36	.00	1.00	1.00	2.00	1.00	.0	53.01
212	1.500	15.70	.1	.0	.0	5.82	30.32	30.32	.00	1.00	1.00	2.00	1.00	.0	50.11
213	1.400	15.70	.1	.0	.0	6.04	25.33	25.33	.00	1.00	1.00	2.00	1.00	.0	47.38
214	1.300	15.70	.1	.0	.0	6.25	21.22	21.22	.00	1.00	1.00	2.00	1.00	.0	44.79
215	1.200	15.70	.1	.0	.0	6.42	17.84	17.84	.00	1.00	1.00	2.00	1.00	.0	42.34
216	1.100	15.70	.1	.0	.0	6.58	15.05	15.05	.00	1.00	1.00	2.00	1.00	.0	40.03
217	1.000	15.70	.1	.0	.0	6.71	12.75	12.75	.00	1.00	1.00	2.00	1.00	.0	37.95
218	.900	15.70	.1	.0	.0	6.82	10.86	10.86	.00	1.00	1.00	2.00	1.00	.0	35.78
219	.800	15.70	.1	.0	.0	6.91	9.30	9.30	.00	1.00	1.00	2.00	1.00	.0	33.82
220	.700	15.70	.1	.0	.0	6.99	8.01	8.01	.00	1.00	1.00	2.00	1.00	.0	31.97
221	.600	15.70	.1	.0	.0	7.06	6.96	6.96	.00	1.00	1.00	2.00	1.00	.0	30.22
222	.500	15.70	.1	.0	.0	7.13	6.09	6.09	.00	1.00	1.00	2.00	1.00	.0	28.54
223	.400	15.70	.1	.0	.0	7.18	5.38	5.38	.00	1.00	1.00	2.00	1.00	.0	26.89
224	.300	15.70	.1	.0	.0	7.22	4.83	4.83	.00	1.00	1.00	2.00	1.00	.0	25.11
225	.200	15.70	.1	.0	.0	7.25	4.49	4.49	.00	1.00	1.00	2.00	1.00	.0	22.81
226	.100	15.70	.1	.0	.0	7.15	4.62	4.62	.00	1.00	1.00	2.00	1.00	.0	18.66
227	.000	15.70	.1	.0	.0	6.16	6.21	6.21	.00	1.00	1.00	2.00	1.00	.0	8.61

* CM-I = CHLORIDES MG/L
 ** G/GU M NCM = NBOD MG/L

1
 STREAM SUMMARY
 CROWLEY HIGH GULLY

CM-II = SULFATES MG/L

TRAVEL TIME = 12.2 DAYS

MAXIMUM EFFLUENT = 100.0 PERCENT

FLOW = .0013 TO .0013 CMS
 DISPERSION = .0928 TO .0928 SQ M/S
 VELOCITY = .0018 TO .0018 M/S
 DEPTH = .22 TO .22 M
 WIDTH = 3.4 TO 3.4 M

BOD DECAY = .11 TO .11 PER DAY
 NH3 DECAY = .00 TO .00 PER DAY
 SDMNT OXYGEN DEMAND = 1.30 TO 1.30 G/SO M/D
 NH3 SOURCE = .00 TO .00 G/SQ M/D
 REGENERATION = 2.80 TO 2.80 PER DAY
 BOD SETTLING = .26 TO .26 PER DAY
 ORGN DECAY = .00 TO .00 PER DAY
 ORGN SETTLING = .00 TO .00 PER DAY

TEMPERATURE = 15.70 TO 15.70 DEG C
 DISSOLVED OXYGEN = 5.35 TO 7.25 MG/L

BAYOU PLAQUEMINE BRUIE WATERSHED
 WINTER PROJECTION RUN

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECATY 1/DA	CBOD SETT 1/DA	ANBOD DECATY 1/DA	FULL SOD *	CORR SOD *	ORGN DECATY 1/DA	ORGN SETT 1/DA	NH3 DECATY 1/DA	NH3 SRCE *	DEHIT RATE 1/DA	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECATY 1/DA	NCM DECATY 1/DA	NCM SETT 1/DA
287	25.600	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
288	25.500	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
289	25.400	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
290	25.300	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
291	25.200	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
292	25.100	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
293	25.000	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
294	24.900	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
295	24.800	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
296	24.700	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
297	24.600	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
298	24.500	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
299	24.400	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
300	24.300	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
301	24.200	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
302	24.100	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
303	24.000	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
304	23.900	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
305	23.800	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
306	23.700	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
307	23.600	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
308	23.500	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
309	23.400	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
310	23.300	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
311	23.200	9.93	5.23	.04	.25	.00	1.37	1.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03
20	DEG C RATE		.05		.25	.00	1.80	1.80	.00	.00	.00	.00	.00	.00	.00	.00	.00	17.50	.15
AVG	20 DEG C RATE		5.71		.25				.00	.00	.00	.00	.00	.00	.00	.00	.00		

* G/SQ M/D

** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CN-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGIU MG/L	IH3 MG/L	NO3+2 MG/L	TOTN MG/L	PHOS MG/L	CIIL A US/L	MACRO **	COLI #/100ML	NCH *
287	25.600	15.70	.1	.0	.0	6.85	20.53	20.53	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.98
288	25.500	15.70	.1	.0	.0	6.92	20.47	20.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.96
289	25.400	15.70	.1	.0	.0	6.98	20.41	20.41	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.94
290	25.300	15.70	.1	.0	.0	7.04	20.35	20.35	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.92
291	25.200	15.70	.1	.0	.0	7.10	20.29	20.29	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.90
292	25.100	15.70	.1	.0	.0	7.15	20.24	20.24	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.88
293	25.000	15.70	.1	.0	.0	7.21	20.18	20.18	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.86
294	24.900	15.70	.1	.0	.0	7.26	20.12	20.12	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.84
295	24.800	15.70	.1	.0	.0	7.30	20.07	20.07	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.82
296	24.700	15.70	.1	.0	.0	7.35	20.01	20.01	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.81
297	24.600	15.70	.1	.0	.0	7.39	19.95	19.95	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.79
298	24.500	15.70	.1	.0	.0	7.44	19.90	19.90	.00	1.00	1.00	2.00	1.00	.0	.0	0.	18.77

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOD *	CORR SOD *	ORGN DECAT 1/DA	ORGN SETT 1/DA	ORGN DECAT 1/DA	NH3 SRCE	NH3 DECAT 1/DA	NH3 SRCE	DENIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA	
316	22.700	9.93	2.15	.07	.16	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.03
317	22.600	9.93	2.15	.07	.16	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.03
318	22.500	9.93	2.15	.07	.16	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.03
319	22.400	9.93	2.15	.07	.16	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.03
320	22.300	9.93	2.15	.07	.16	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.03
20 DEG C RATE			.09		.16		1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
AVG 20 DEG C RATE			2.35		.16			.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10

* G/SQ M/D

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	FINDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	ROD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	TOTR MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
316	22.700	15.70	.1	.0	.0	7.47	16.37	16.37	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.89
317	22.600	15.70	.1	.0	.0	7.45	15.92	15.92	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.62
318	22.500	15.70	.1	.0	.0	7.45	15.50	15.50	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.36
319	22.400	15.70	.1	.0	.0	7.44	15.12	15.12	.00	1.00	1.00	2.00	1.00	.0	.0	0.	16.12
320	22.300	15.70	.1	.0	.0	7.44	14.85	14.85	.00	1.00	1.00	2.00	1.00	.0	.0	0.	15.92

* CM-I - CHLORIDES

MG/L

** G/GU M

CM-II - SULFATES

MG/L

NCM = NBOD

MG/L

FINAL REPORT BAYOU BLANIC
REACH NO. 20 LAKE TO RK 6.4

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	NCM *
321	UPR RCH	.1105	15.70	.13	.0	.0	7.44	14.85	14.85	.00	1.00	1.00	1.00	.0	.0	0.	15.92

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV VELO M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRN SQ M/S	MEAN VELO M/S
321	22.30	22.00	.1105	74.4	.038	.09	.51	5.6	864.	1688.1	2.9	0.	.000	4.068	.038
322	22.00	21.70	.1105	74.4	.038	.09	.51	5.6	864.	1688.1	2.9	0.	.000	4.068	.038
323	21.70	21.40	.1105	74.4	.038	.09	.51	5.6	864.	1688.1	2.9	0.	.000	4.068	.038
324	21.40	21.10	.1105	74.4	.038	.09	.51	5.6	864.	1688.1	2.9	0.	.000	4.068	.038

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MG/L	REAER RATE 1/DA	CBOD DECAT 1/DA	CBOD SETT 1/DA	ANBOD DECAT 1/DA	FULL SOD	CORR SOD	ORGN DECAT 1/DA	ORGN SETT 1/DA	NRH3 DECAT 1/DA	NH3 SRCE	DENIT RATE 1/DA	PO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAT 1/DA	NCM DECAT 1/DA	NCM SETT 1/DA
374	6.000	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
375	5.600	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
376	5.200	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
377	4.800	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
378	4.400	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
379	4.000	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
380	3.600	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
381	3.200	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
382	2.800	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
383	2.400	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
384	2.000	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
385	1.600	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
386	1.200	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
387	.800	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
388	.400	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
389	.000	9.93	.44	.07	.00	.00	.76	.76	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
20 DEG C RATE:			.09	.00	.00	.00	1.00	1.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	28.84	.00
AVG 20 DEG C RATE			.48	.00	.00	.00			.00	.00									

* G/SQ M/D ** MG/L/DAV

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I *	CM-II *	DO MG/L	BOD MG/L	EBOD MG/L	ORGH MG/L	PH3 MG/L	NO3+2 MG/L	TOTI MG/L	PHOS MG/L	CHL A UG/L	MACRO **	COLI #/100ML	HCM †
374	6.000	15.70	.1	.0	.0	6.23	9.19	9.19	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.64
375	5.600	15.70	.1	.0	.0	6.02	8.80	8.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.55
376	5.200	15.70	.1	.0	.0	5.86	8.44	8.44	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.48
377	4.800	15.70	.1	.0	.0	5.74	8.09	8.09	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.44
378	4.400	15.70	.1	.0	.0	5.65	7.77	7.77	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.43
379	4.000	15.70	.1	.0	.0	5.59	7.47	7.47	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.45
380	3.600	15.70	.1	.0	.0	5.53	7.18	7.18	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.52
381	3.200	15.70	.1	.0	.0	5.49	6.92	6.92	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.64
382	2.800	15.70	.1	.0	.0	5.45	6.67	6.67	.00	1.00	1.00	2.00	1.00	.0	.0	0.	8.83
383	2.400	15.70	.1	.0	.0	5.40	6.43	6.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.11
384	2.000	15.70	.1	.0	.0	5.36	6.21	6.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.49
385	1.600	15.70	.1	.0	.0	5.32	6.00	6.00	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.01
386	1.200	15.70	.1	.0	.0	5.28	5.80	5.80	.00	1.00	1.00	2.00	1.00	.0	.0	0.	10.72
387	.800	15.70	.1	.0	.0	5.26	5.61	5.61	.00	1.00	1.00	2.00	1.00	.0	.0	0.	11.66
388	.400	15.70	.1	.0	.0	5.27	5.43	5.43	.00	1.00	1.00	2.00	1.00	.0	.0	0.	12.90
389	.000	15.70	.1	.0	.0	5.37	5.26	5.26	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.54

† CM-I = CHLORIDES MG/L

CM-II = SULFATES MG/L

HCM = NBOD MG/L

** G/CU M

1
STREAM SUMMARY
BAYOU BLANC

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUH

TRAVEL TIME = 25.3 DAYS
MAXIMUM EFFLUENT = 74.4 PERCENT

FLOW = .1105 TO .1105 CMS
DISPERSION = .6382 TO 8.0000 SQ M/S
VELOCITY = .0039 TO .1198 M/S
DEPTH = .21 TO 1.43 M
WIDTH = 4.3 TO 39.2 M
BOD DECAY = .04 TO .07 PER DAY
NH3 DECAY = .00 TO .00 PLR DAY
SINKH OXYGEN DEMD = .76 TO 1.37 G/SQ M/D
NH3 SOURCE = .00 TO .00 G/SQ M/D
REAERATION = .44 TO 5.23 PER DAY
BOD SETTLING = .00 TO .25 PER DAY
ORGN DECAY = .00 TO .00 PER DAY
ORGN SETTLING = .00 TO .00 PER DAY

TEMPERATURE = 15.70 TO 15.70 DEG C
DISSOLVED OXYGEN = 5.26 TO 7.79 MG/L

1
FINAL REPORT N. COULEE TRIEF
REACH NO. 23 ESTHERWOOD TO BPIB

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

***** REACH INPUTS *****

ELEM NO.	TYPE	FLOW CMS	TEMP DEG C	SALH PPT	ADVCTV M/S	TRAVEL TIME DAYS	DEPTH M	DO MG/L	CH-II *	CM-1 *	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NO3+2 MG/L	PHOS MG/L	CHL A UG/L	COLI #/100ML	NCM *	
395	HDWTR	.0283	.00	.00	.00	.00	8.90	9.49	9.49	9.49	9.49	9.49	.00	.00	.00	.00	.00	.00	0.	1.73
395	WSTID	.0022	.00	.00	.00	.00	2.00	69.00	69.00	69.00	69.00	69.00	.00	.00	.00	.00	.00	.00	0.	64.50

***** HYDRAULIC PARAMETER VALUES *****

ELEM NO.	BEGIN DIST KM	ENDING DIST KM	FLOW CMS	PCT EFF	ADVCTV M/S	TRAVEL TIME DAYS	DEPTH M	WIDTH M	VOLUME CU M	SURFACE AREA SQ M	X-SECT AREA SQ M	TIDAL PRISM CU M	TIDAL VELO M/S	DISPRSN SQ M/S	MEAN VELO M/S
395	1.00	.90	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
396	.90	.80	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
397	.80	.70	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
398	.70	.60	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
399	.60	.50	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
400	.50	.40	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
401	.40	.30	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
402	.30	.20	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
403	.20	.10	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019

404	-10	.00	.0305	7.2	.019	.06	.26	6.1	159.	614.5	1.6	0.	.000	1.154	.019
TOT															
AVG					.019	.60	.26	6.1	1587.	6145.1	1.6				
CUM						.60									

***** BIOLOGICAL AND PHYSICAL COEFFICIENTS *****

ELEM NO.	ENDING DIST	SAT D.O. MS/L	REAR RATE L/DA	CBOD DECAY 1/DA	CBOD SETT 1/DA	AMPHO D.KAY 1/DA	FULL SOD	CORR SOD	ORGN DECAY 1/DA	ORGN SETT 1/DA	ORGH DECAY 1/DA	NH3 DECAY 1/DA	NH3 SRCE	DEFIT RATE 1/DA	FO4 SRCE	ALG PROD **	MAC PROD **	COLI DECAY 1/DA	COLI #/100ML	NCM DECAY 1/DA	NCM SETT 1/DA
395	.900	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
396	.800	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
397	.700	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
398	.600	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
399	.500	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
400	.400	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
401	.300	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
402	.200	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
403	.100	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06
404	.000	9.93	2.64	.11	.22	.00	1.30	1.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.06

20 DEG C RATE .13
 AVG 20 DEG C RATE 2.88
 * G/SQ M/D ** MG/L/DAY

***** WATER QUALITY CONSTITUENT VALUES *****

ELEM NO.	ENDING DIST	TEMP DEG C	SALIN PPT	CM-I	CM-II	DO MG/L	BOD MG/L	EBOD MG/L	ORGN MG/L	NH3 MG/L	NH3+2 MG/L	TOTN MG/L	PHOS MG/L	CHL A US/L	MACRO **	COLI #/100ML	NCM
395	.900	15.70	.1	.0	.0	8.18	13.36	13.36	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.16
396	.800	15.70	.1	.0	.0	8.07	13.10	13.10	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.11
397	.700	15.70	.1	.0	.0	7.97	12.84	12.84	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.06
398	.600	15.70	.1	.0	.0	7.88	12.58	12.58	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.02
399	.500	15.70	.1	.0	.0	7.80	12.32	12.32	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.01
400	.400	15.70	.1	.0	.0	7.72	12.01	12.01	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.06
401	.300	15.70	.1	.0	.0	7.62	11.58	11.58	.00	1.00	1.00	2.00	1.00	.0	.0	0.	6.31
402	.200	15.70	.1	.0	.0	7.42	10.84	10.84	.00	1.00	1.00	2.00	1.00	.0	.0	0.	7.06
403	.100	15.70	.1	.0	.0	6.92	9.22	9.22	.00	1.00	1.00	2.00	1.00	.0	.0	0.	9.17
404	.000	15.70	.1	.0	.0	5.47	5.21	5.21	.00	1.00	1.00	2.00	1.00	.0	.0	0.	14.96

* CM-I = CHLORIDES MG/L
 ** G/CU M
 CM-II = SULFATES MG/L
 NCM = NBOD MG/L

1
 STREAM SUMMARY
 N. COULEE TRIEF

BAYOU PLAQUEMIN, BRULE WATERSHED
 WINTER PROJECTION RUN

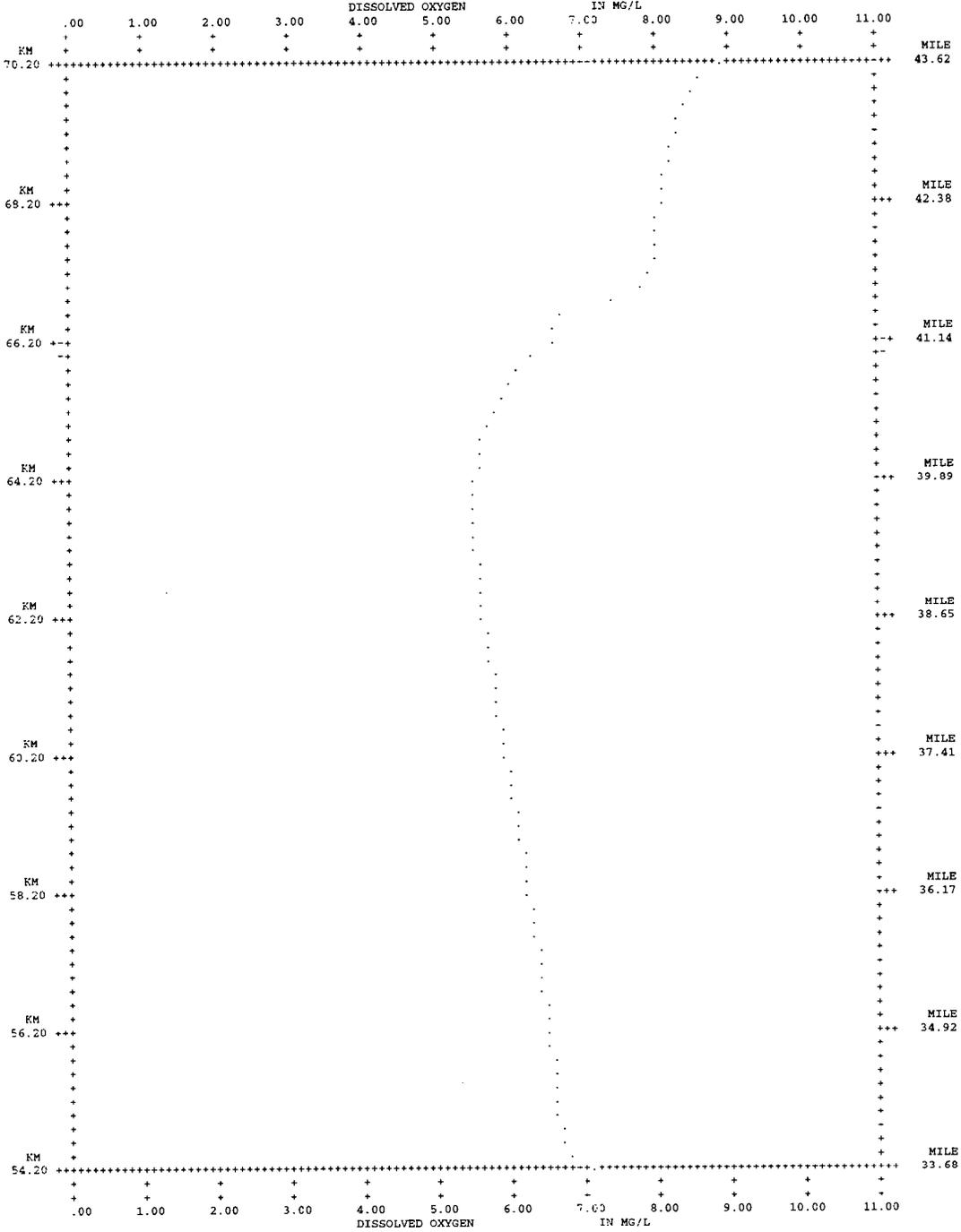
TRAVEL TIME = .6 DAYS

MAXIMUM EFFLUENT = 7.2 PERCENT

FLOW = .0305 TO .0305 CMS
 DISPERSION = 1.1538 TO 1.1538 SQ M/S
 VELOCITY = .0192 TO .0192 M/S
 DEPTH = .26 TO .26 M
 WIDTH = 6.1 TO 6.1 M
 BOD DECAY = .11 TO .11 PER DAY
 NH3 DECAY = .00 TO .00 PER DAY
 SEDIMENT OXYGEN DEMAND = 1.30 TO 1.30 G/SQ M/D
 NH3 SOURCE = .00 TO .00 G/SQ M/D
 REAERATION = 2.64 TO 2.64 PER DAY
 BOD SETTLING = .22 TO .22 PER DAY
 ORGH DECAY = .00 TO .00 PER DAY
 ORGH SETTLING = .00 TO .00 PER DAY

TEMPERATURE = 15.70 TO 15.70 DEG C
 DISSOLVED OXYGEN = 5.47 TO 8.18 MG/L

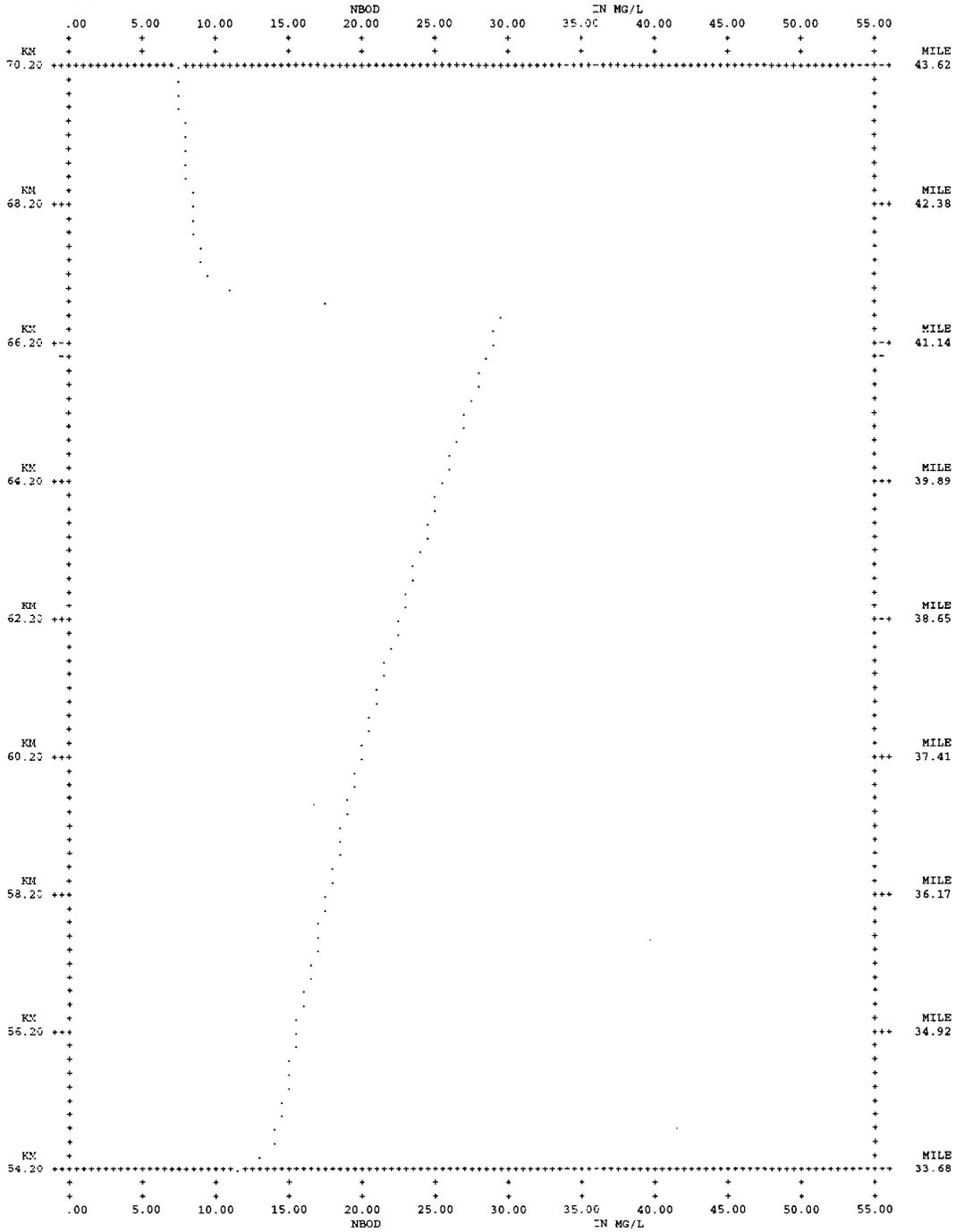
OVERLAY SET * 1, PLOT * 1: BPB @ CHURCH PT RCH 1-3



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 | OR * INDICATES PROFILE = OBSERVED DATA
 +- +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

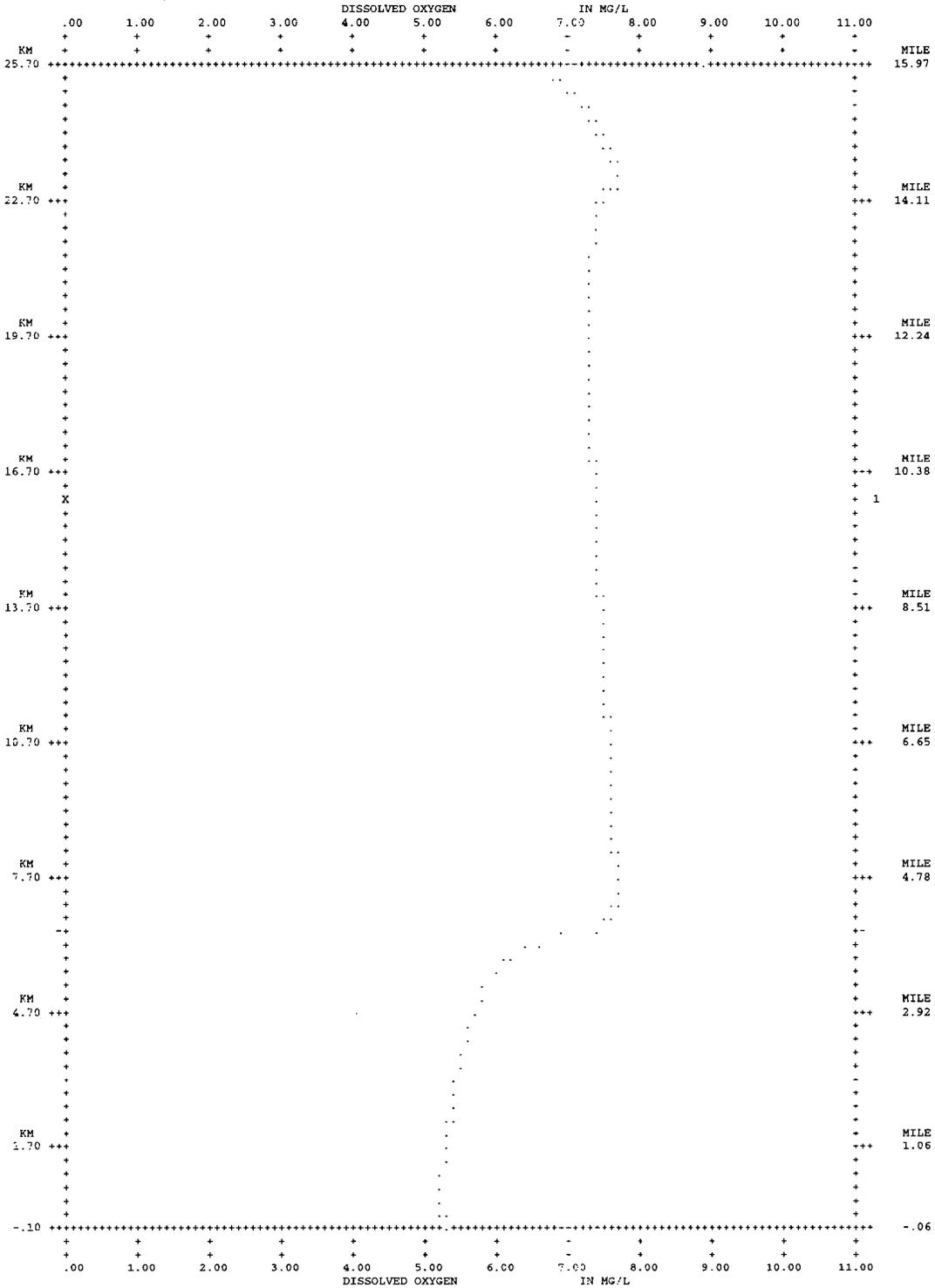
OVERLAY SET # 1, PLOT # 3: BPB @ CHURCH PT RCH 1-3



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

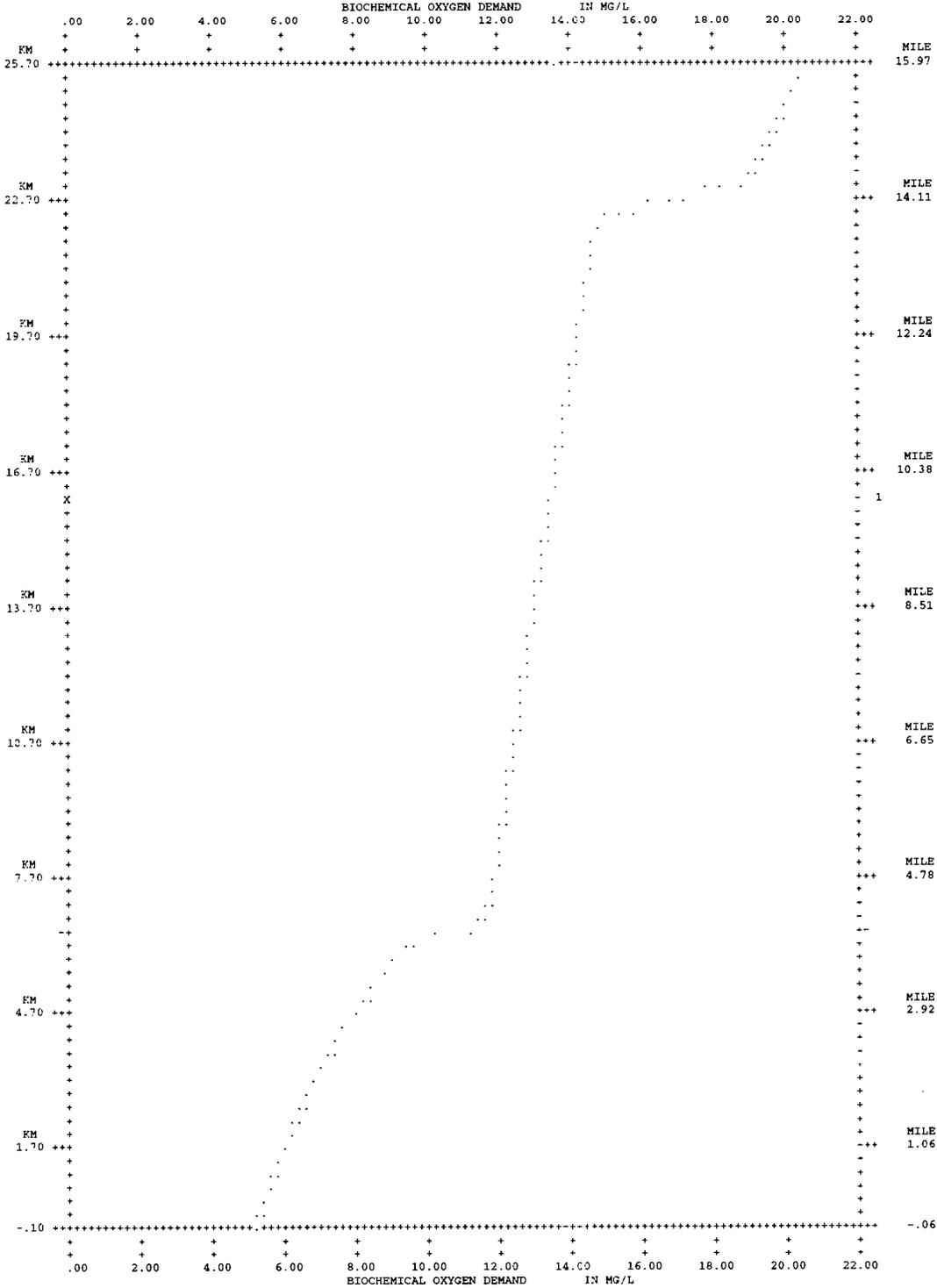
OVERLAY SET # 2, PLOT # 1: BAYOU BLANC RCHS 17-21



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

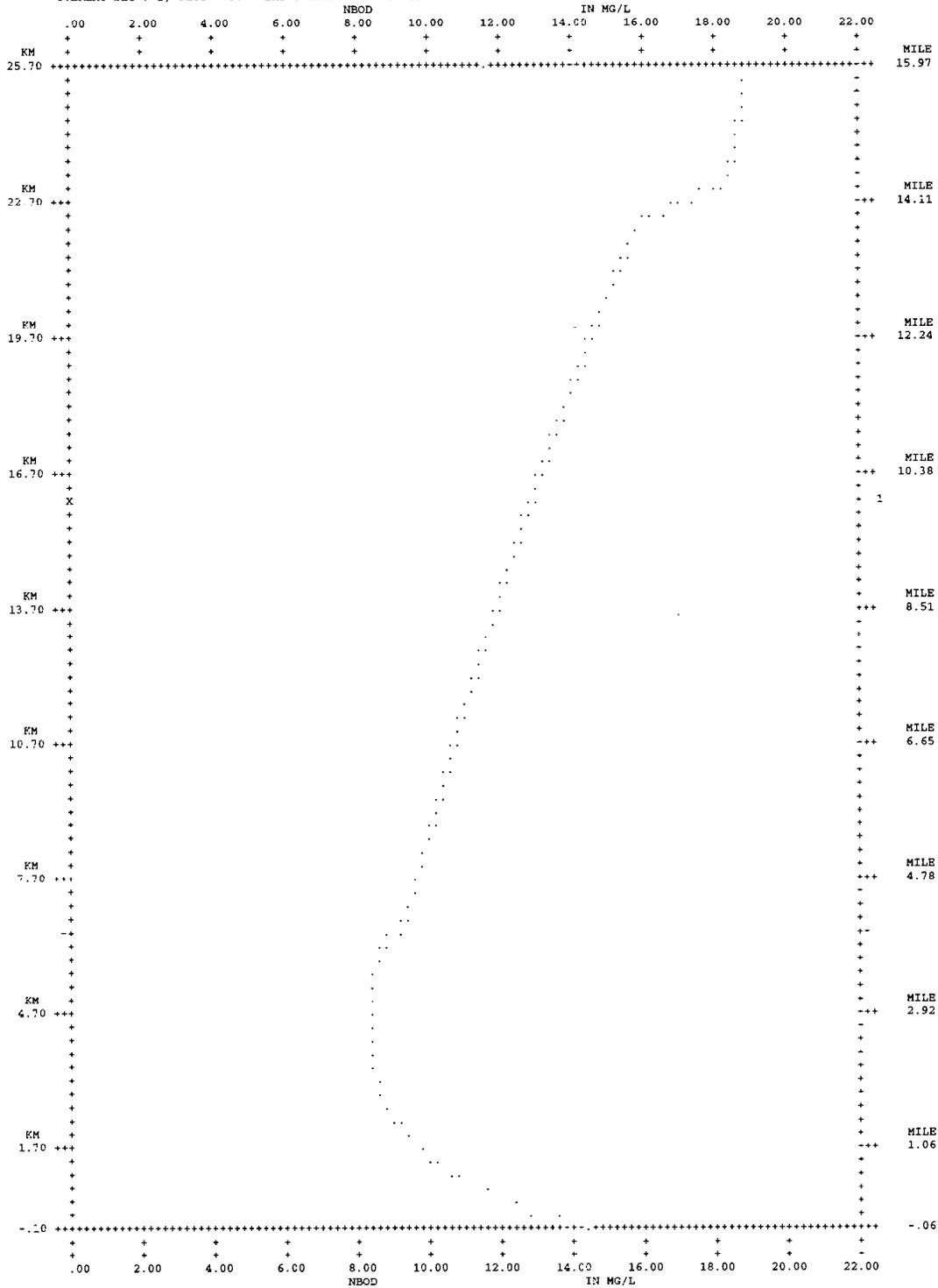
OVERLAY SET # 2, PLOT # 2: BAYOU BLANC RCHS 17-21



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHRD
 WINTER PROJECTION RUN

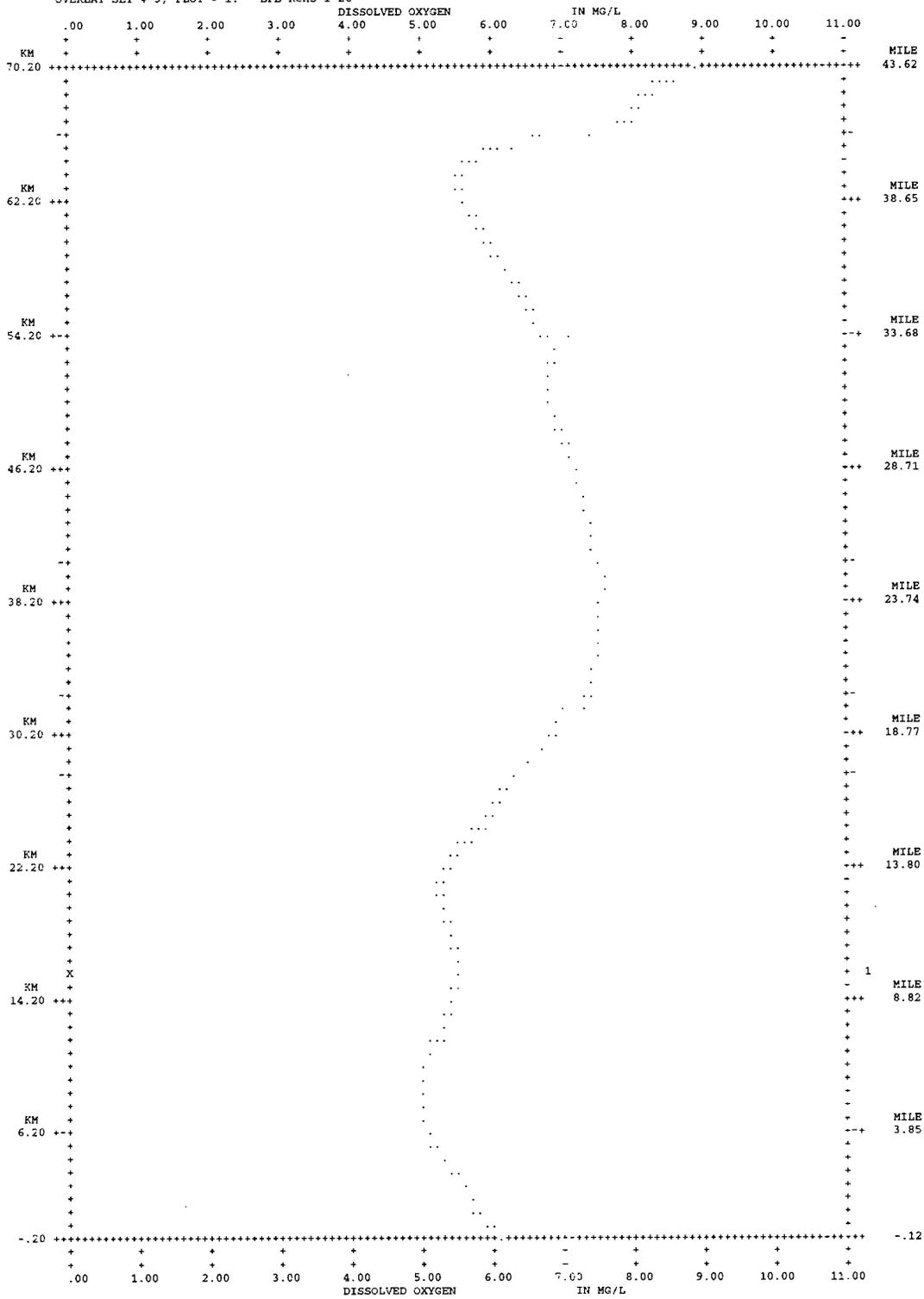
OVERLAY SET # 2, PLOT # 3: BAYOU BLANC RCHS 17-21



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

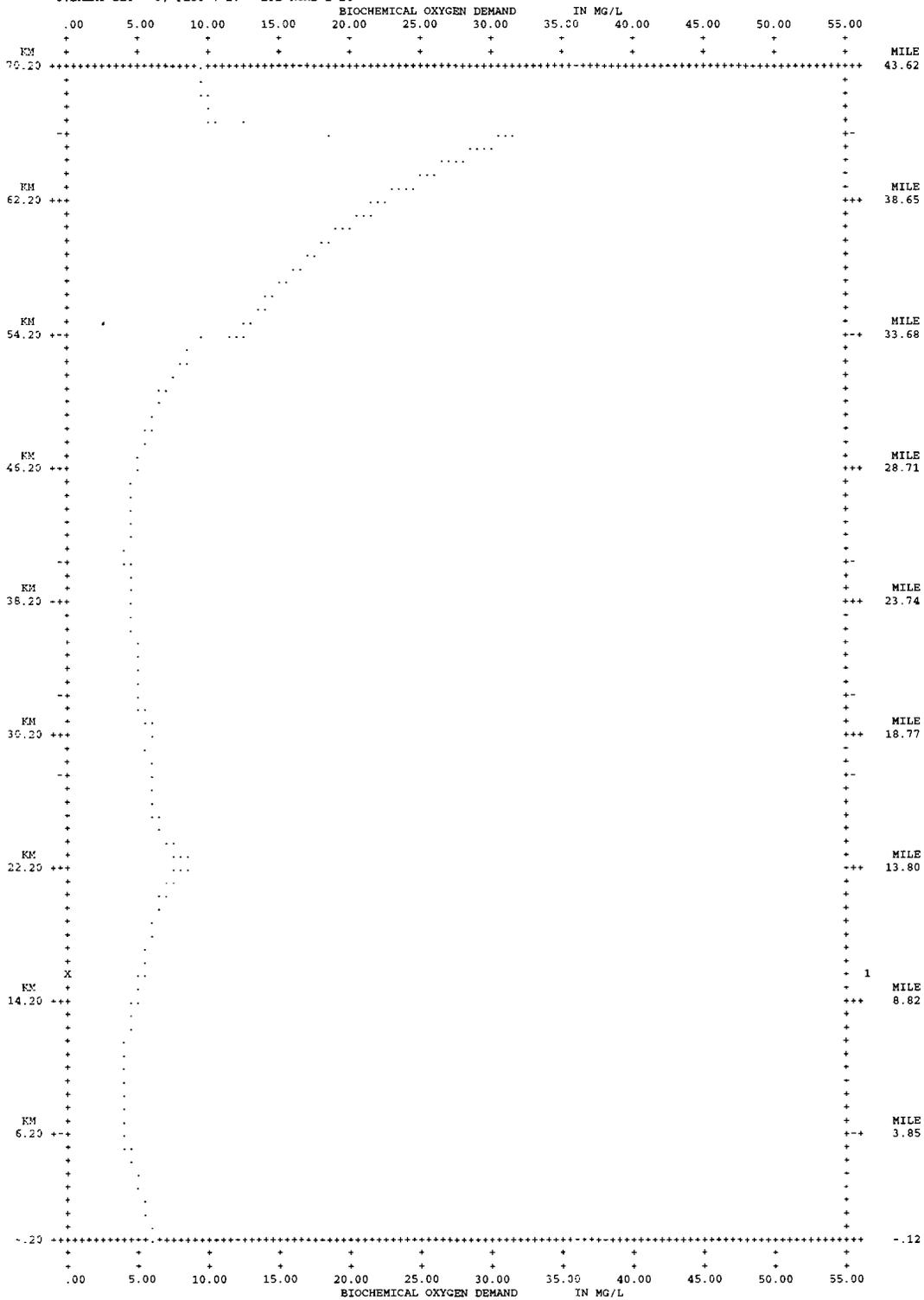
OVERLAY SET # 3, PLOT # 1: BPB RCHS 1-26



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

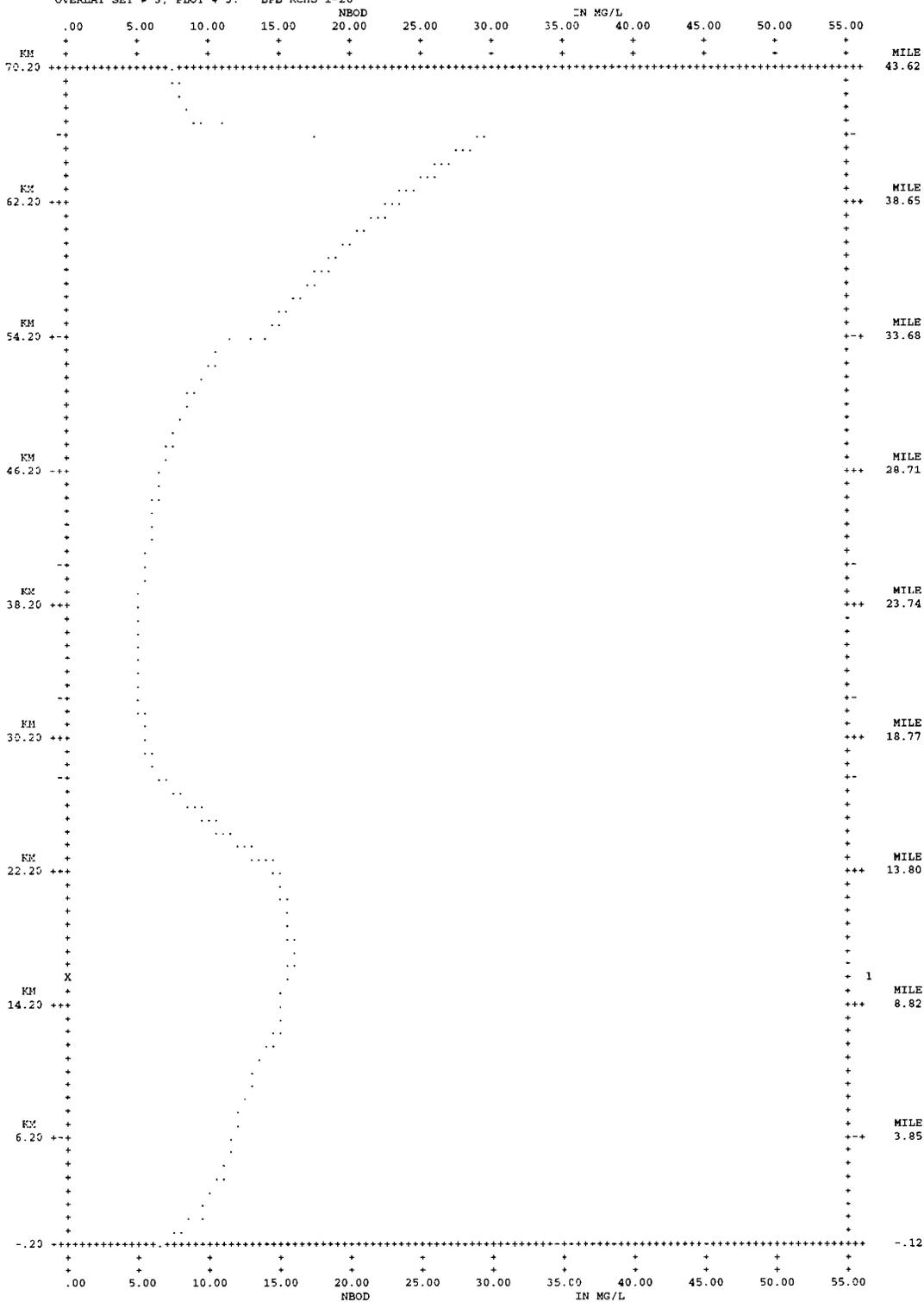
OVERLAY SET # 3, PLOT # 2: BPB RCHS 1-26



. . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

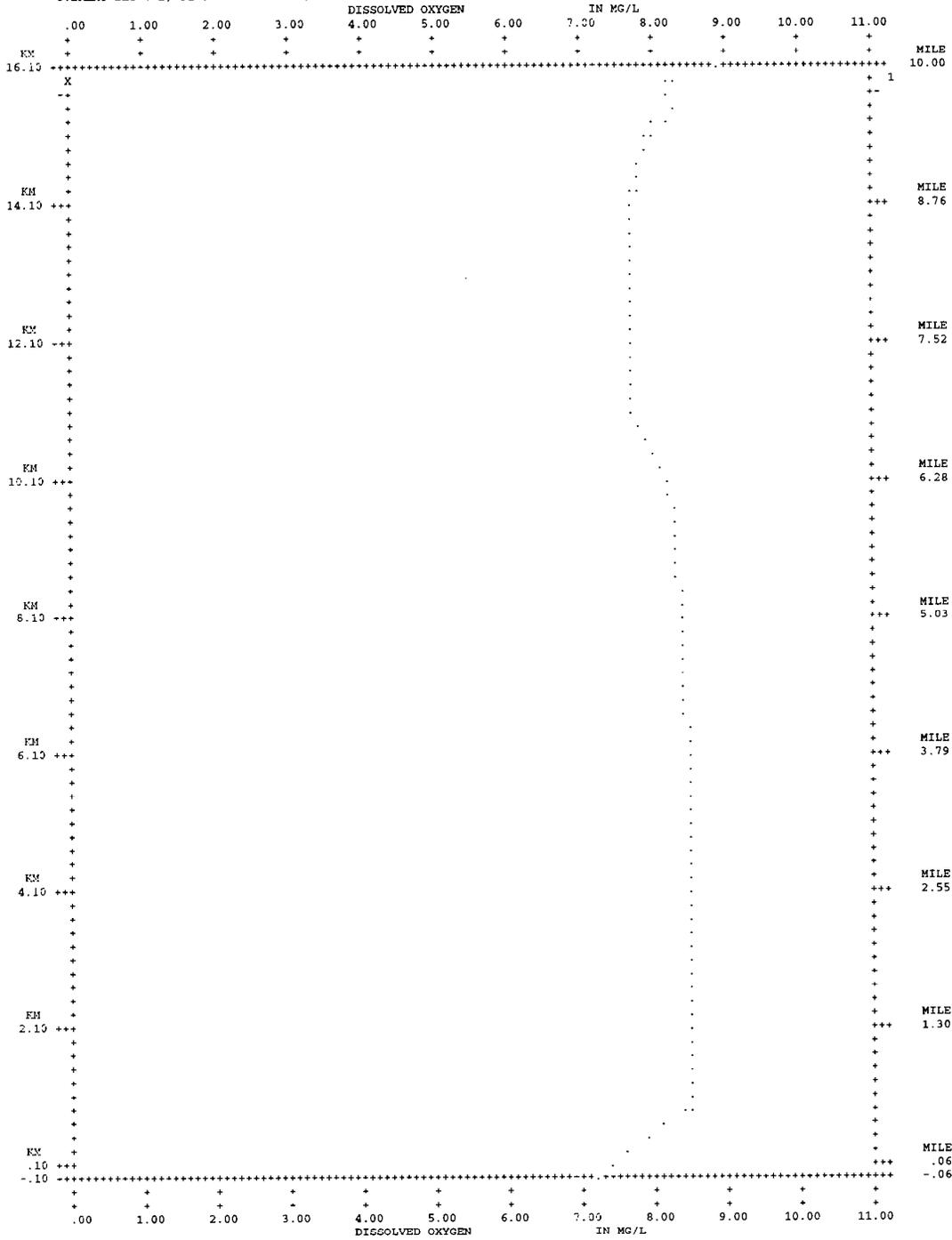
OVERLAY SET # 3, PLOT # 3: BPB RCHS 1-26



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

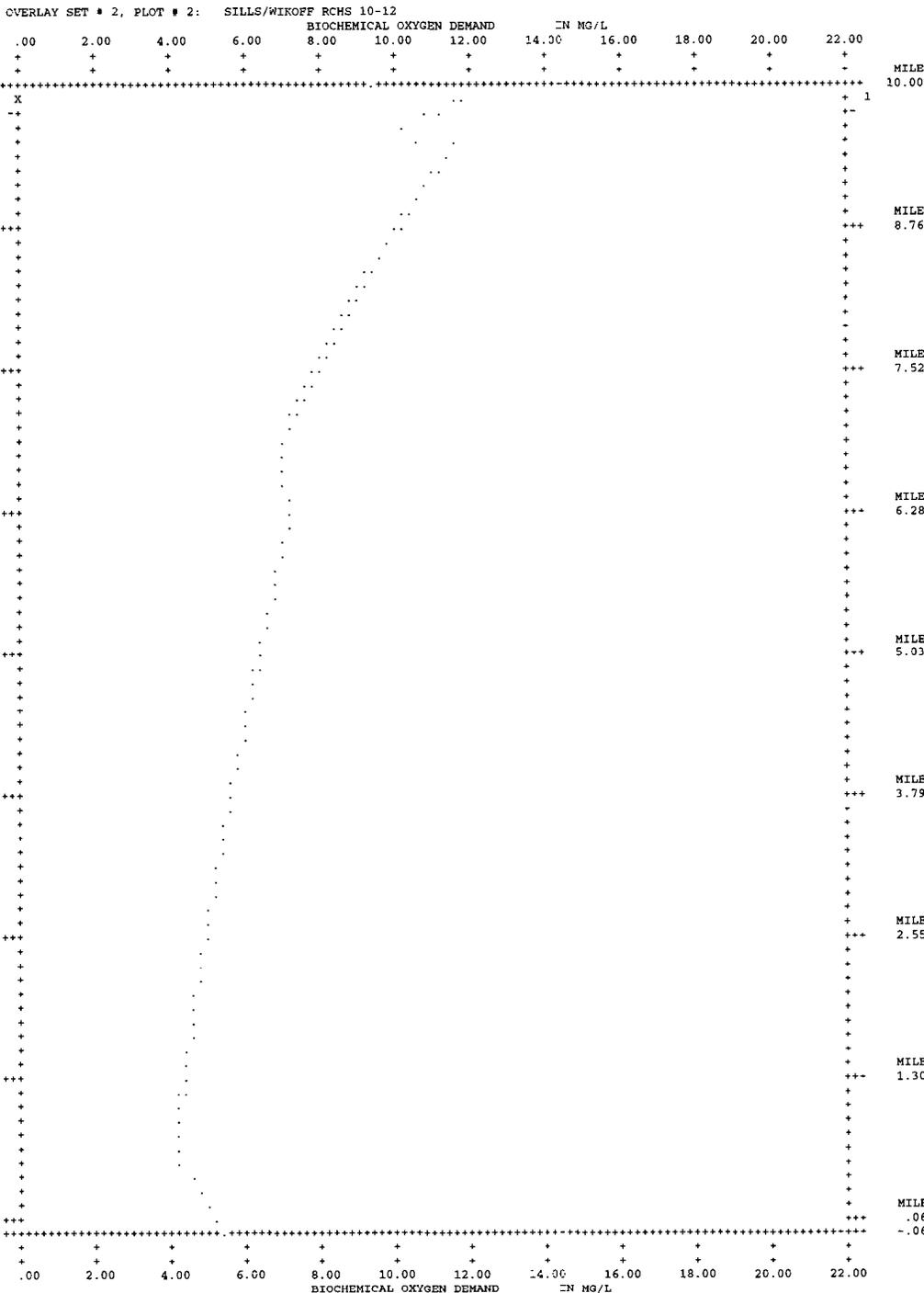
BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

OVERLAY SET # 2, PLOT # 1: SILLS/WIROFF RCHS 10-12



. . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

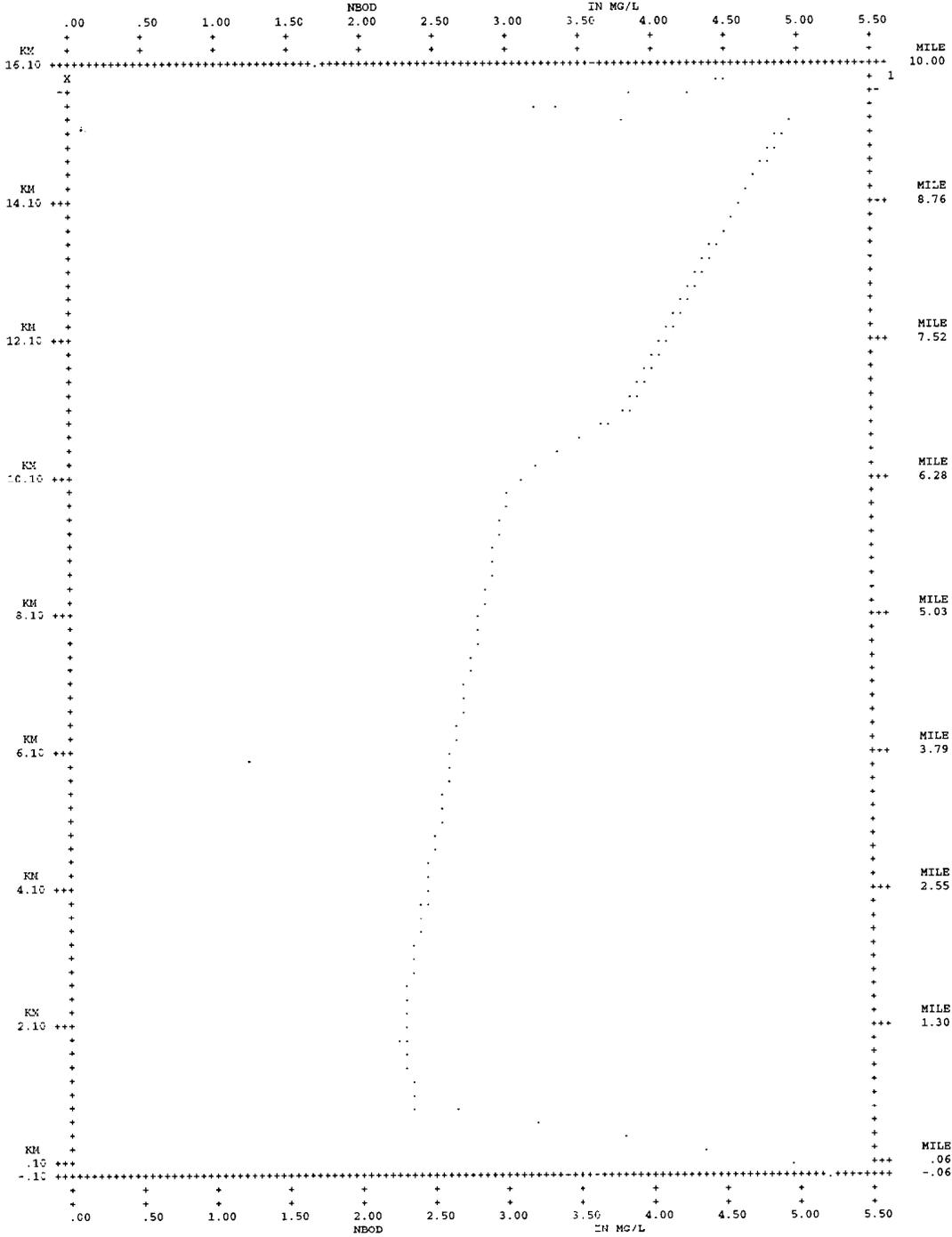
BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN



..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +-+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

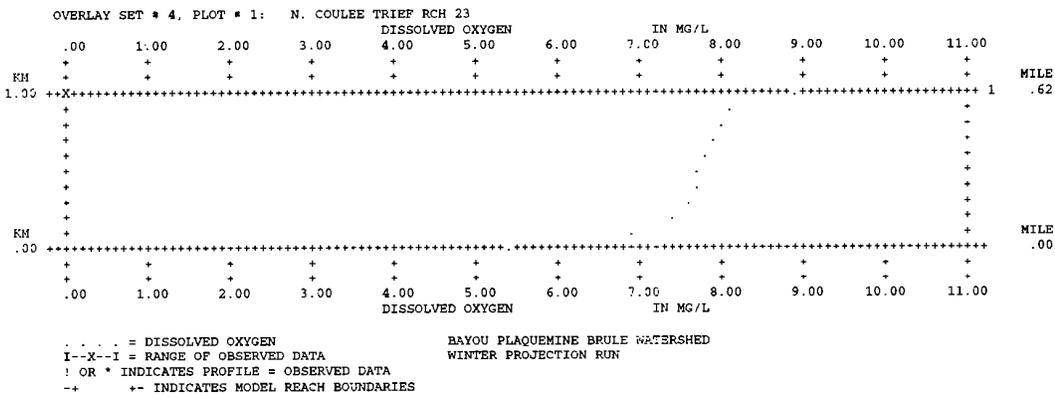
OVERLAY SET # 2, PLOT # 3: SILLS/WIKOFF RCHS 10-12



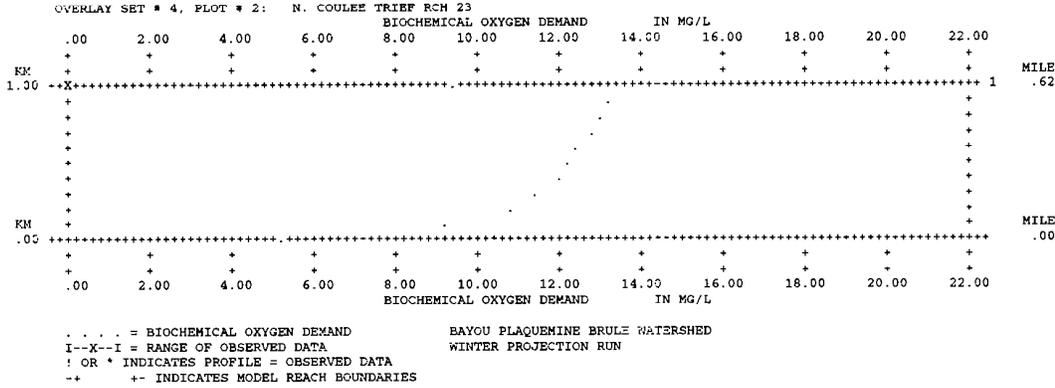
. . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+-- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

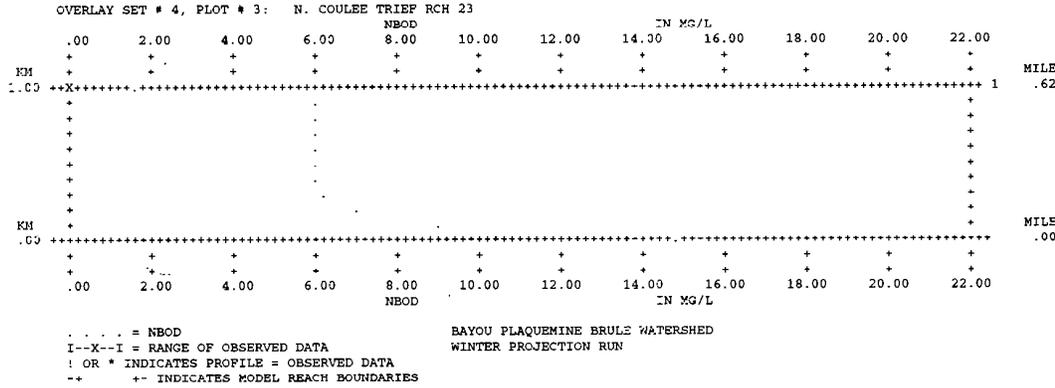
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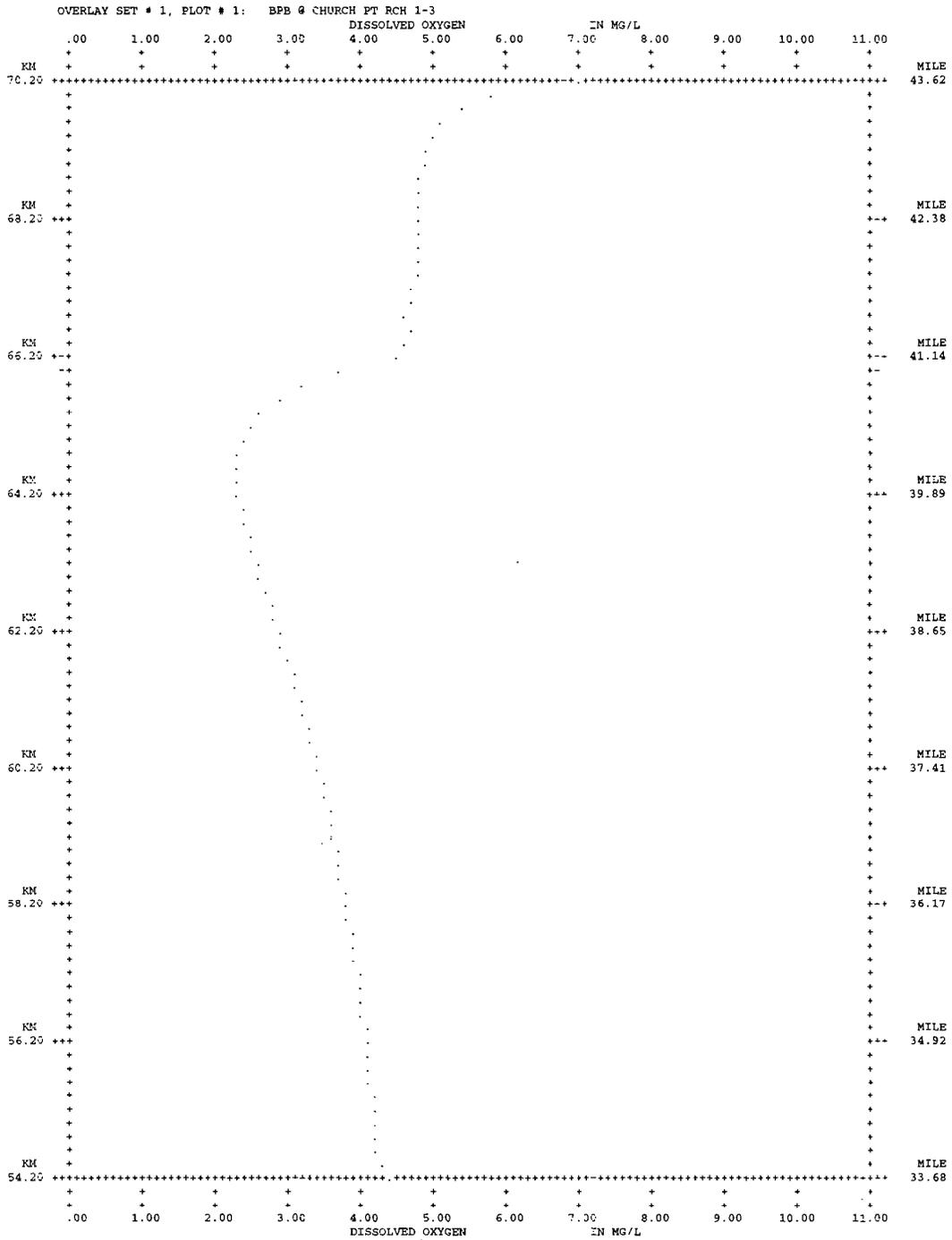
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APPENDIX E - WATER QUALITY PROJECTIONS WITH LESS STRINGENT LIMITATIONS

Facility	Flow (mgd)	Projected limits (BOD ₅ /NH ₃ -N/DO)	
		Summer	Winter
Church Point POTW	0.80	10/5/5	30/15/6
Atwood Acres STP	.046	10/10/5	30/15/2
Acadian Fine Foods STP	.025	30/15/2	30/15/2*
North Rayne POTW	.020	30/15/2	30/15/2*
Crowley High School POTW	.034	10/10/5	30/15/2
Crowley POTW	2.47	10/5/5	10/10/6
Rayne POTW	1.50	10/10/5	10/10/6
Estherwood POTW	.080	20/10/2	30/15/2

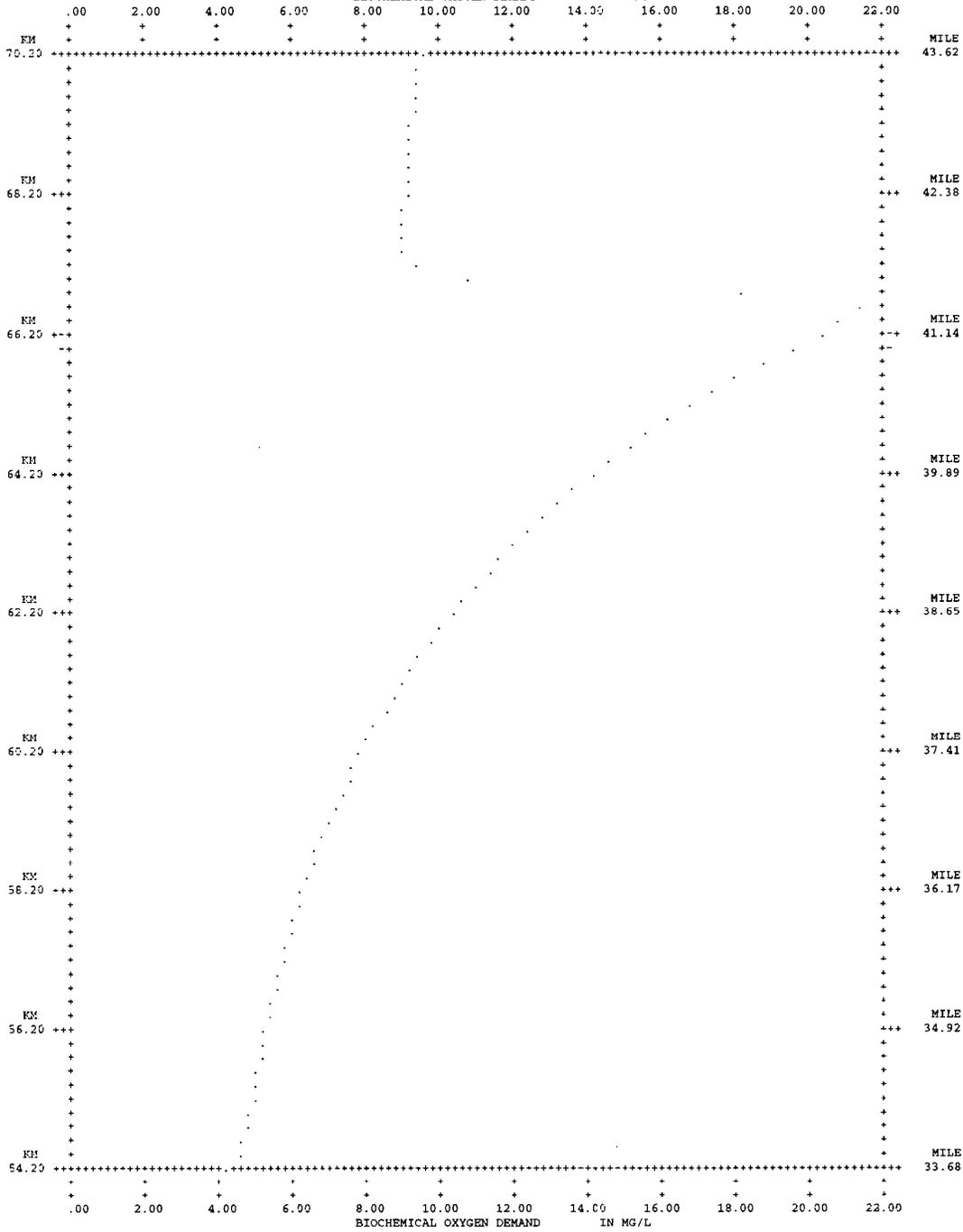
* No change



. . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR ^ INDICATES PROFILE = OBSERVED DATA
 -- ++ INDICATES MODEL REACH BOUNDARIES

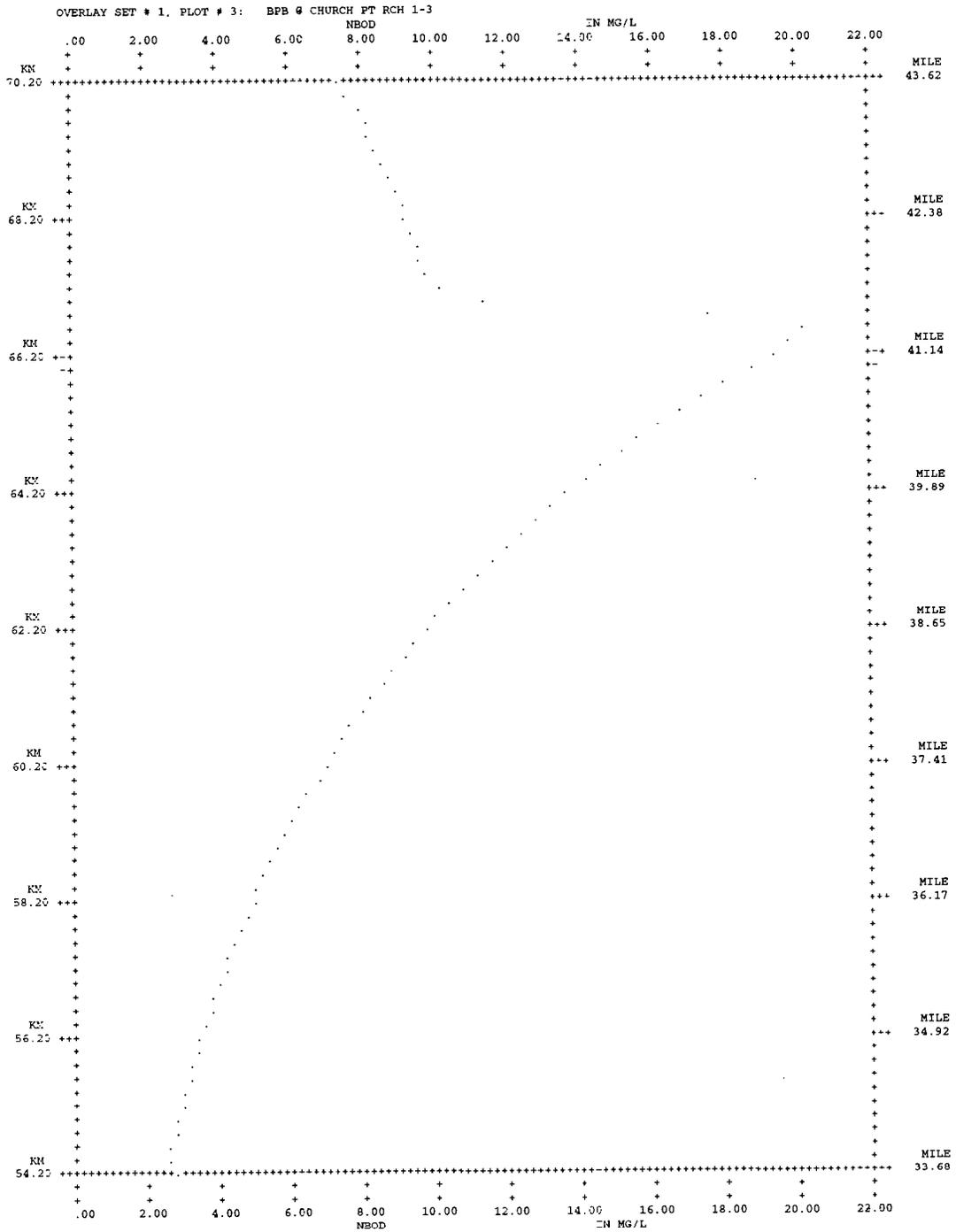
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

OVERLAY SET # 1, PLOT # 2: BPB @ CHURCH PT RCH 1-3
 BIOCHEMICAL OXYGEN DEMAND IN MG/L



..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

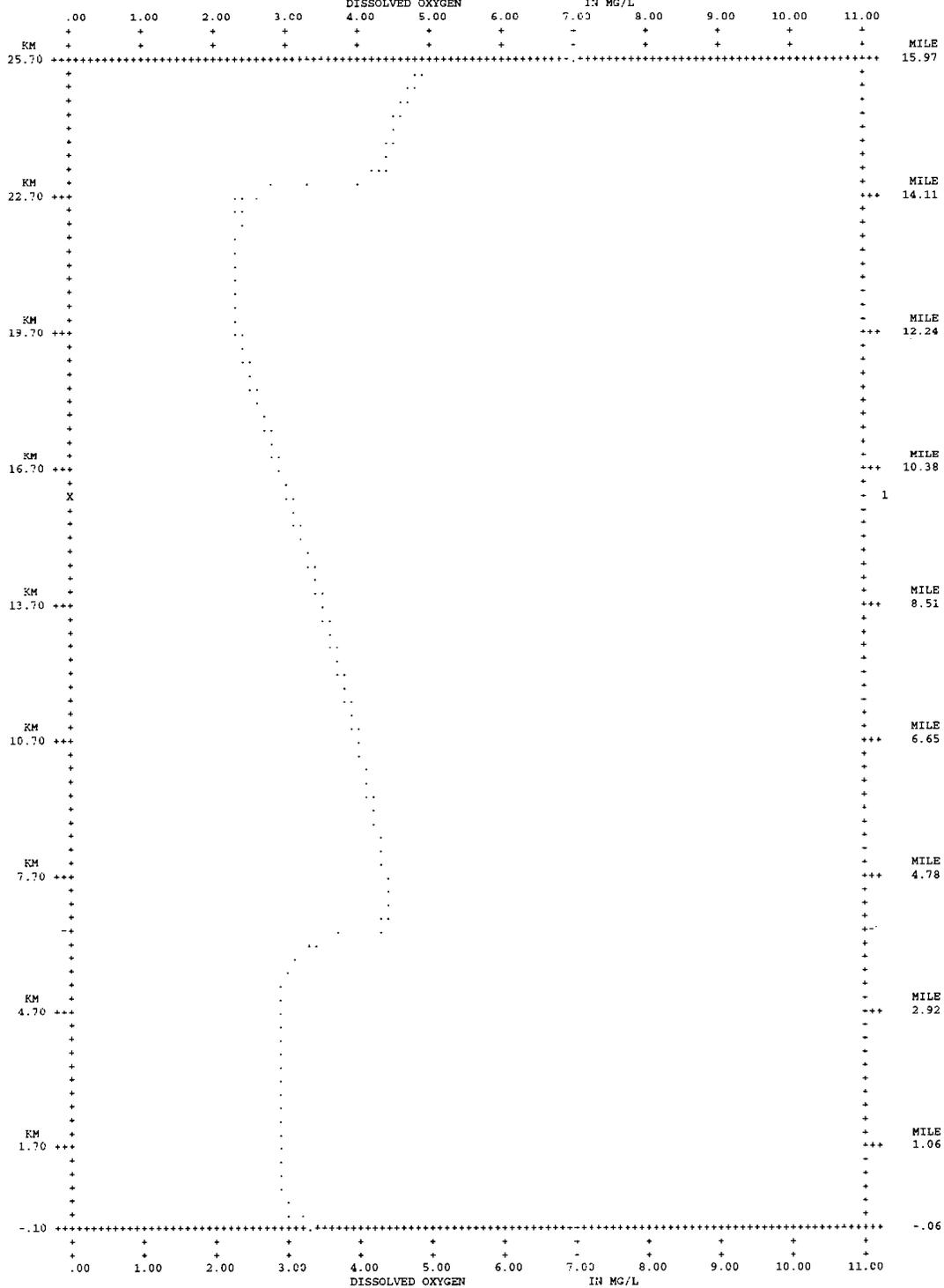
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- ++ INDICATES MODEL REACH BOUNDARIES

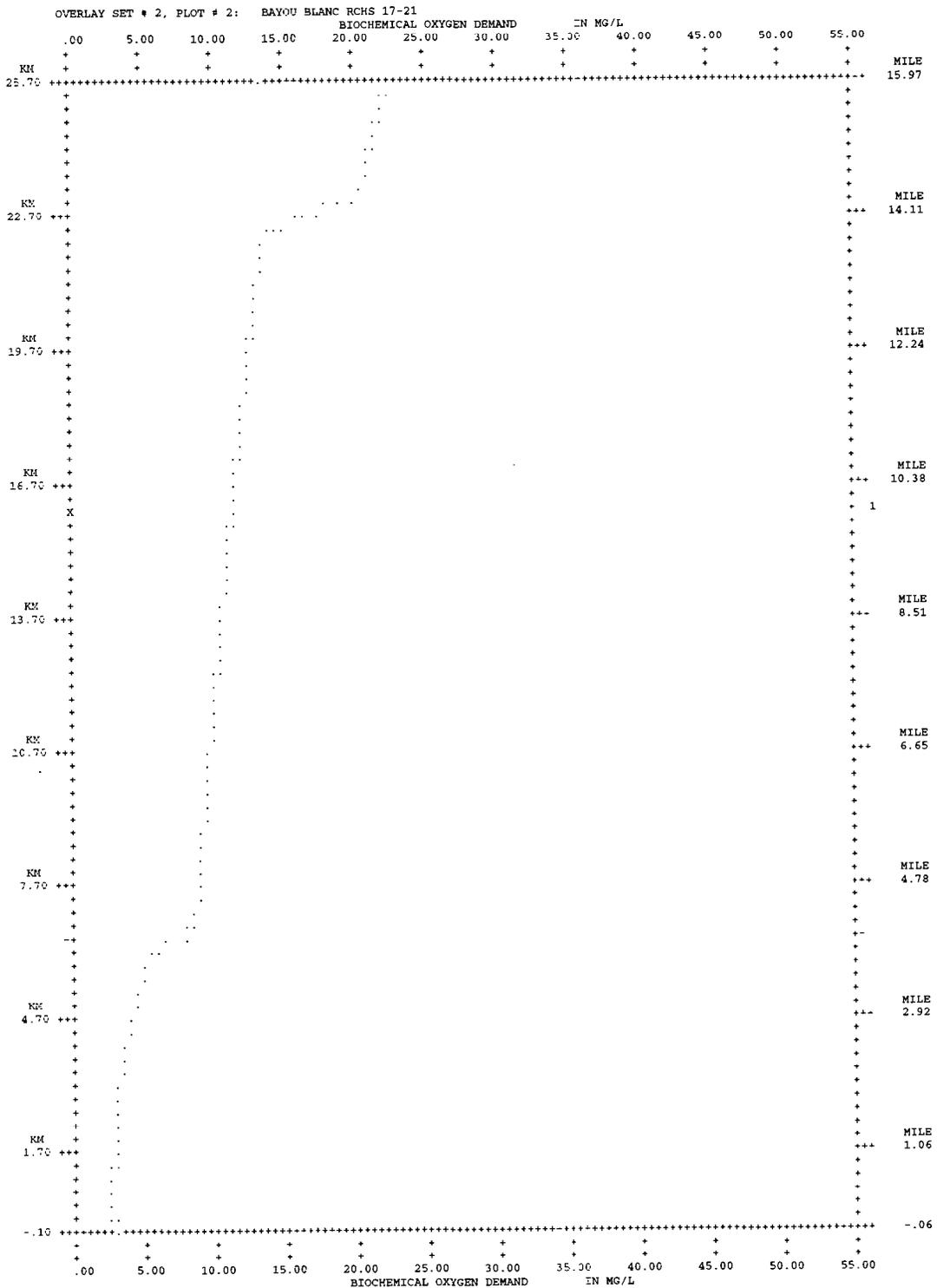
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

OVERLAY SET # 2, PLOT # 1: BAYOU BLANC RCHS 17-21



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ +- INDICATES MODEL REACH BOUNDARIES

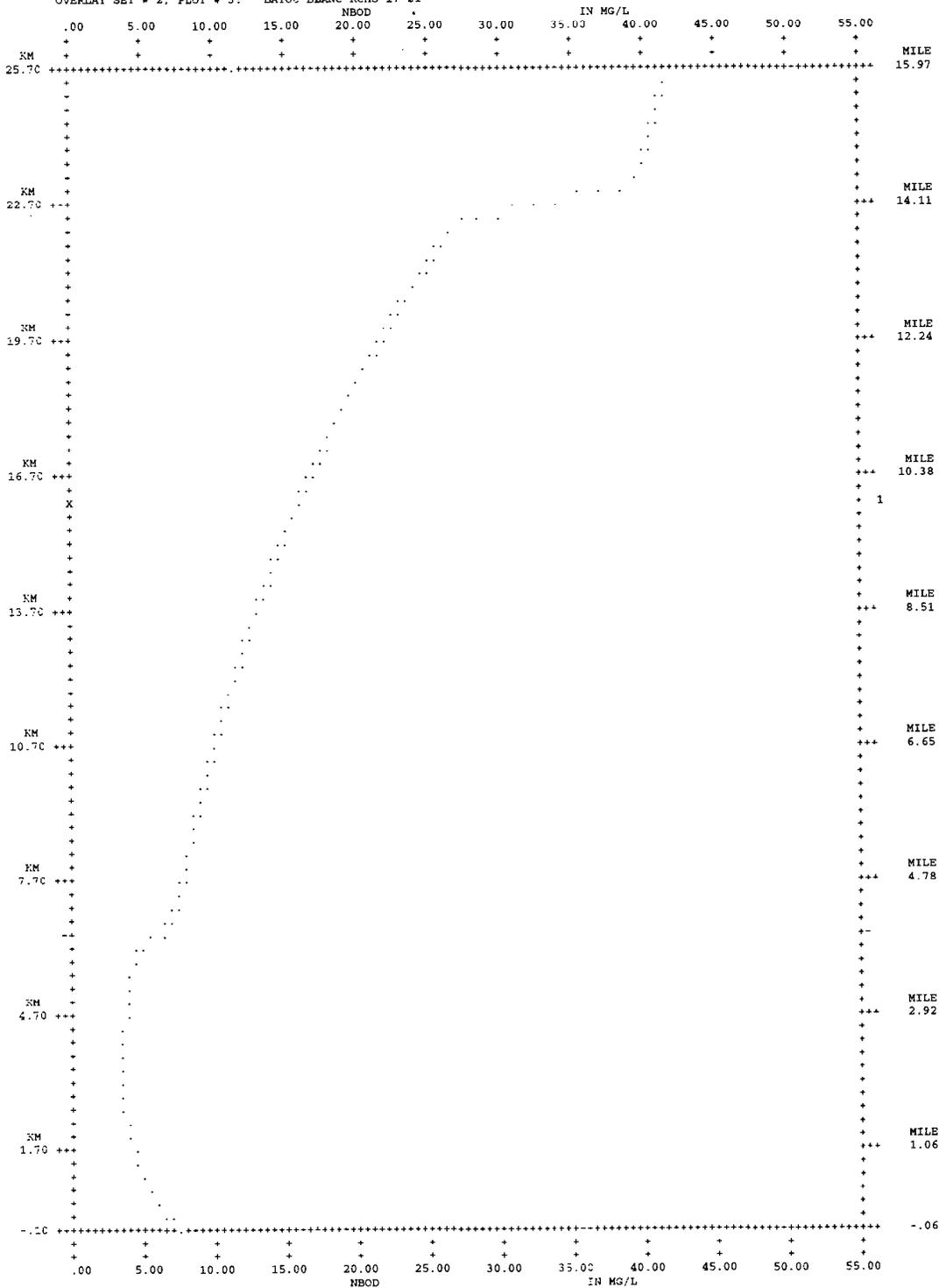
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

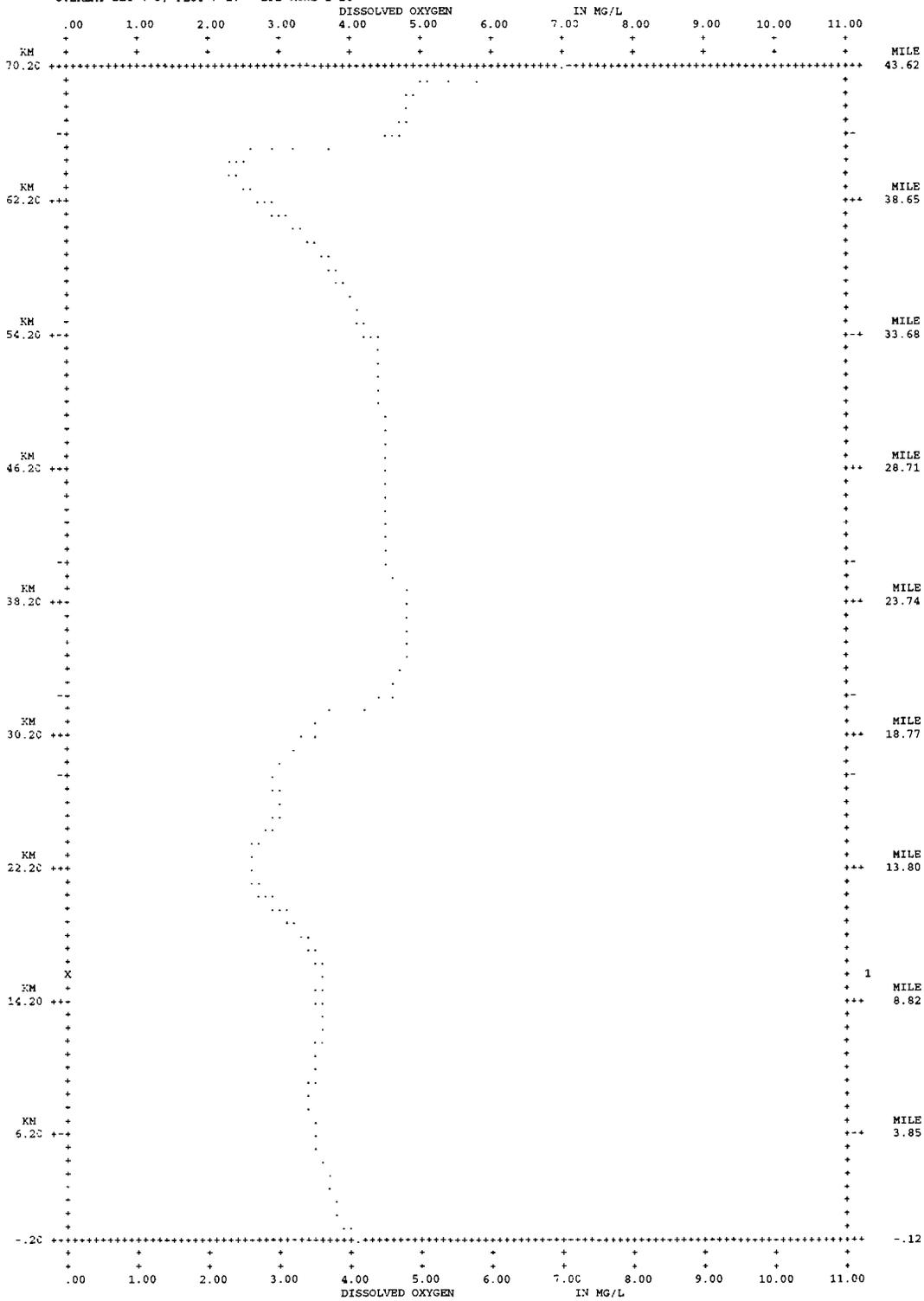
OVERLAY SET # 2, PLOT # 3: BAYOU BLANC RCHS 17-21



. . . . = NBOD
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 : OR * INDICATES PROFILE = OBSERVED DATA
 +- * INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

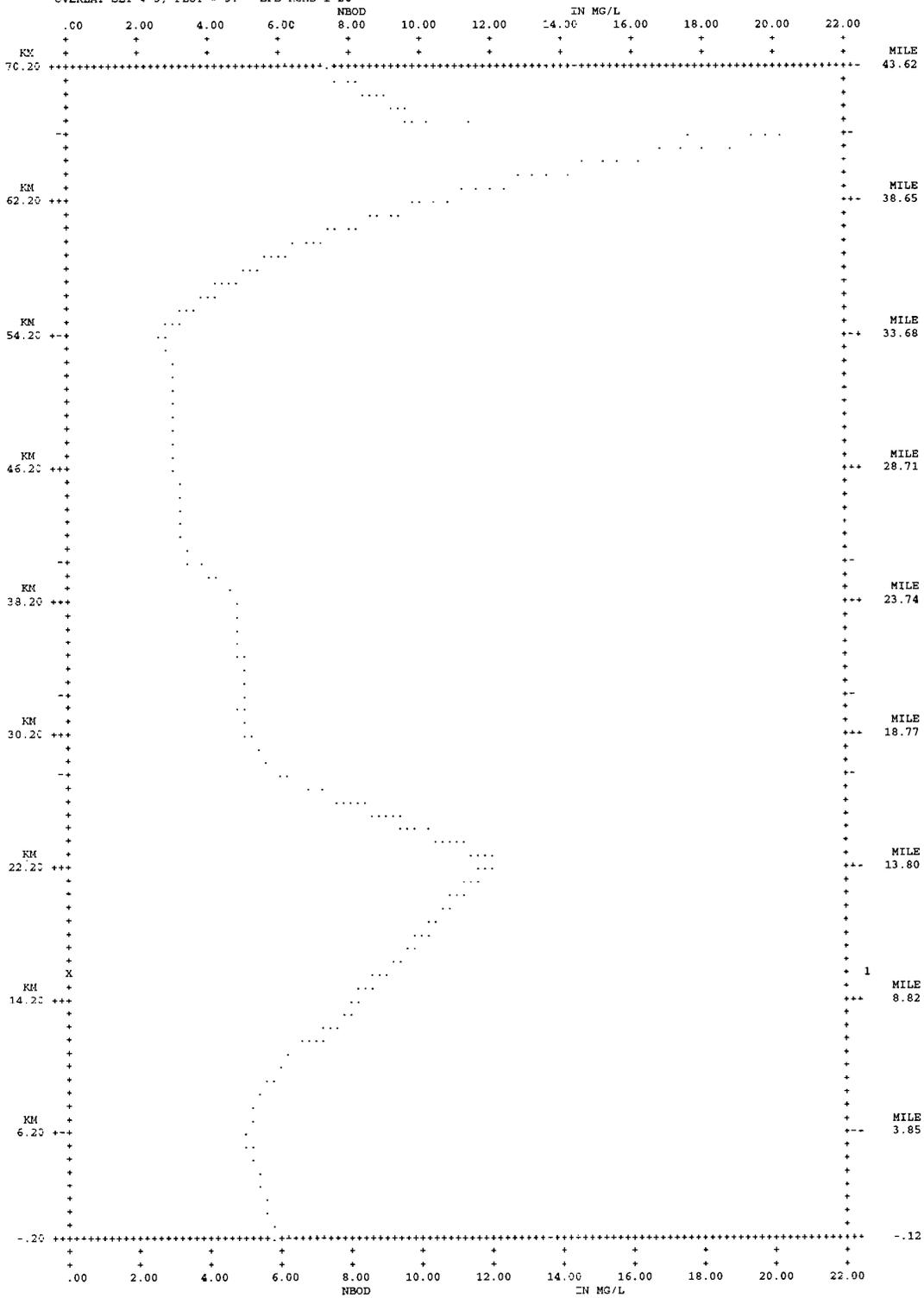
OVERLAY SET # 3, PLOT # 1: BPB RCHS 1-26



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

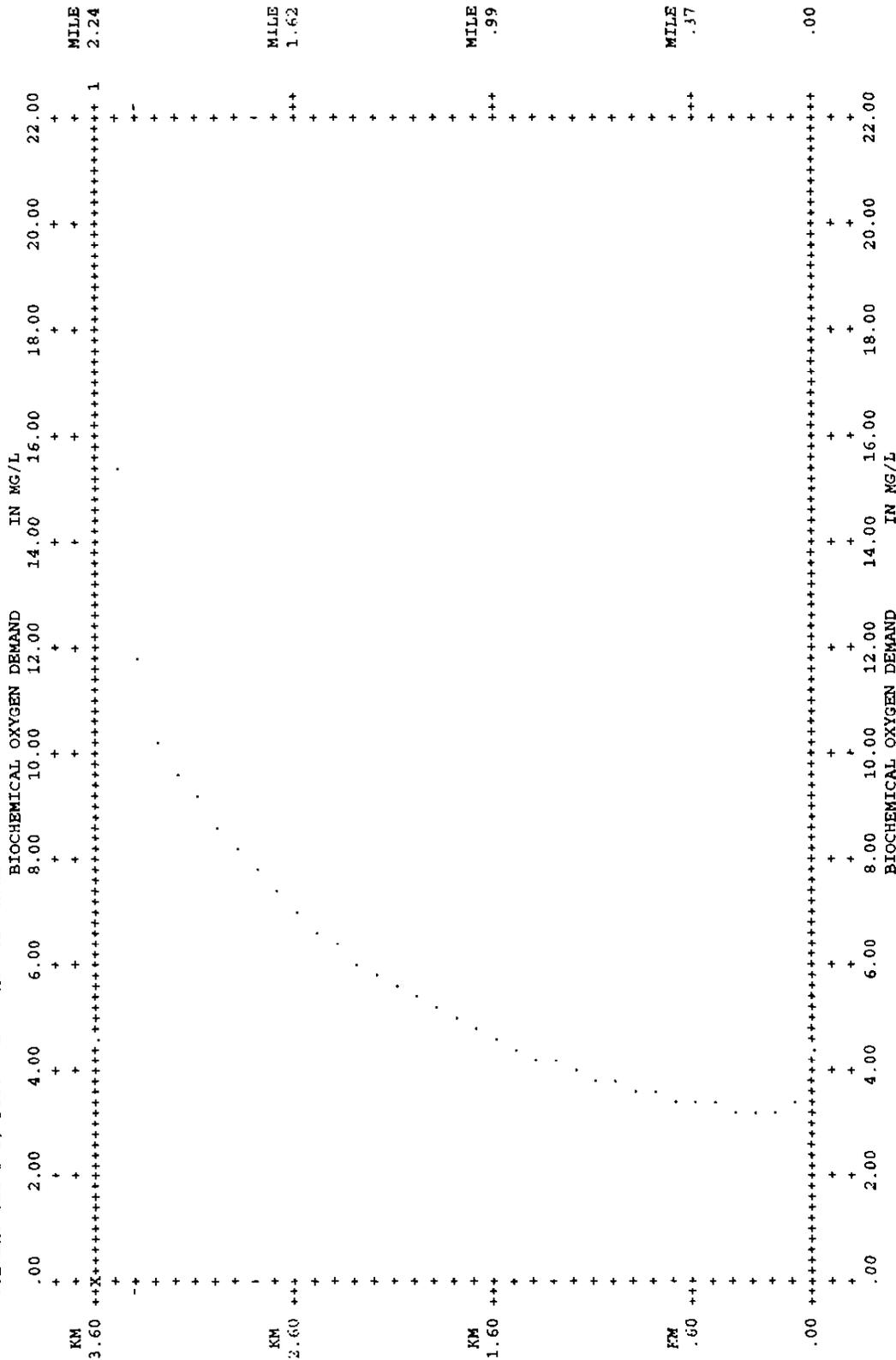
OVERLAY SET # 3, PLOT # 3: BPB RCHS 1-26



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

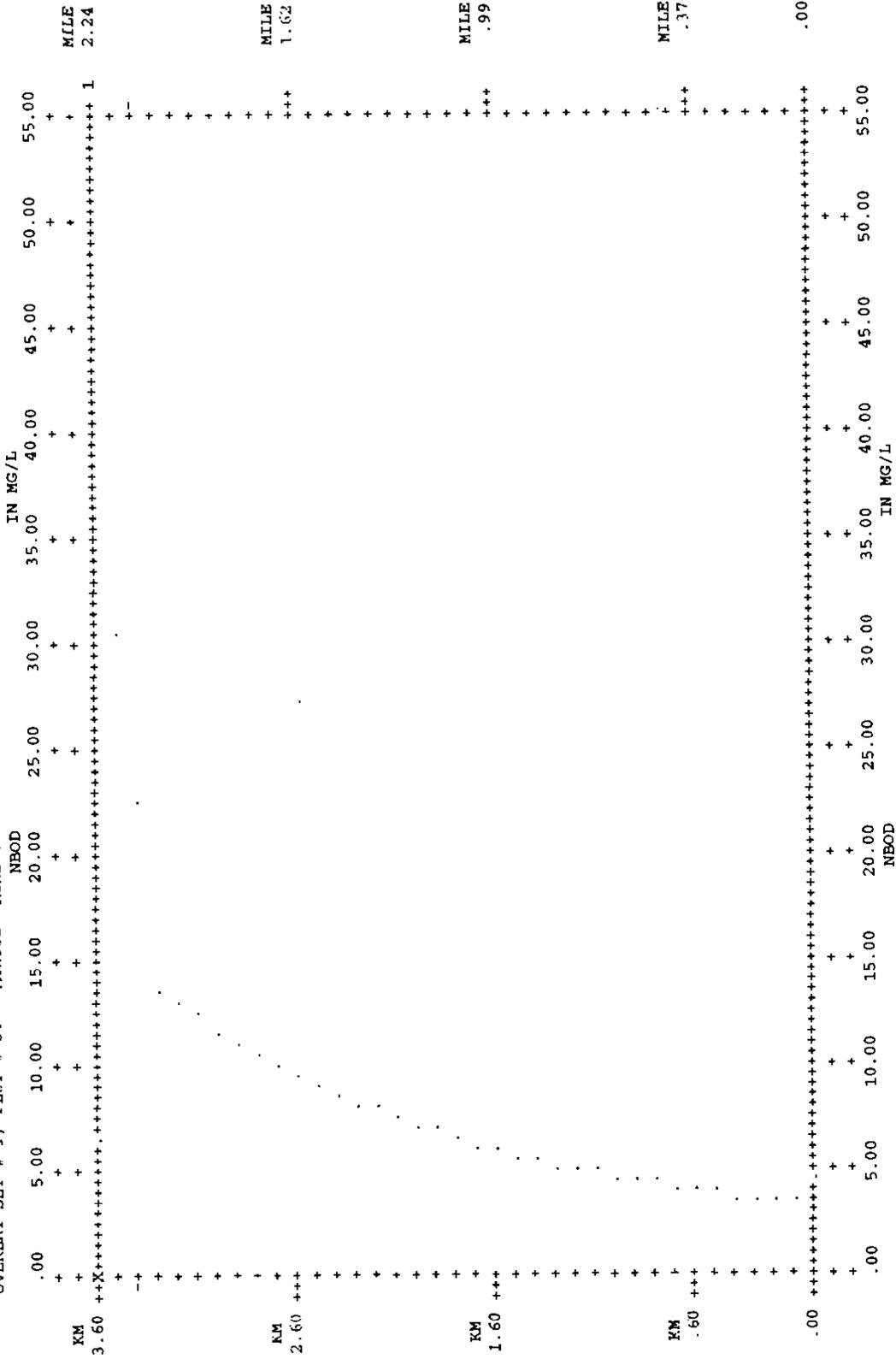
OVERLAY SET # 1, PLOT # 2: ATWOOD RCHS 7-8



..... = BIOCHEMICAL OXYGEN DEMAND
 I-X--I = RANGE OF OBSERVED DATA
 ! OR + INDICATES PROFILE = OBSERVED DATA
 --> +- INDICATES MODEL REACH BOUNDARIES

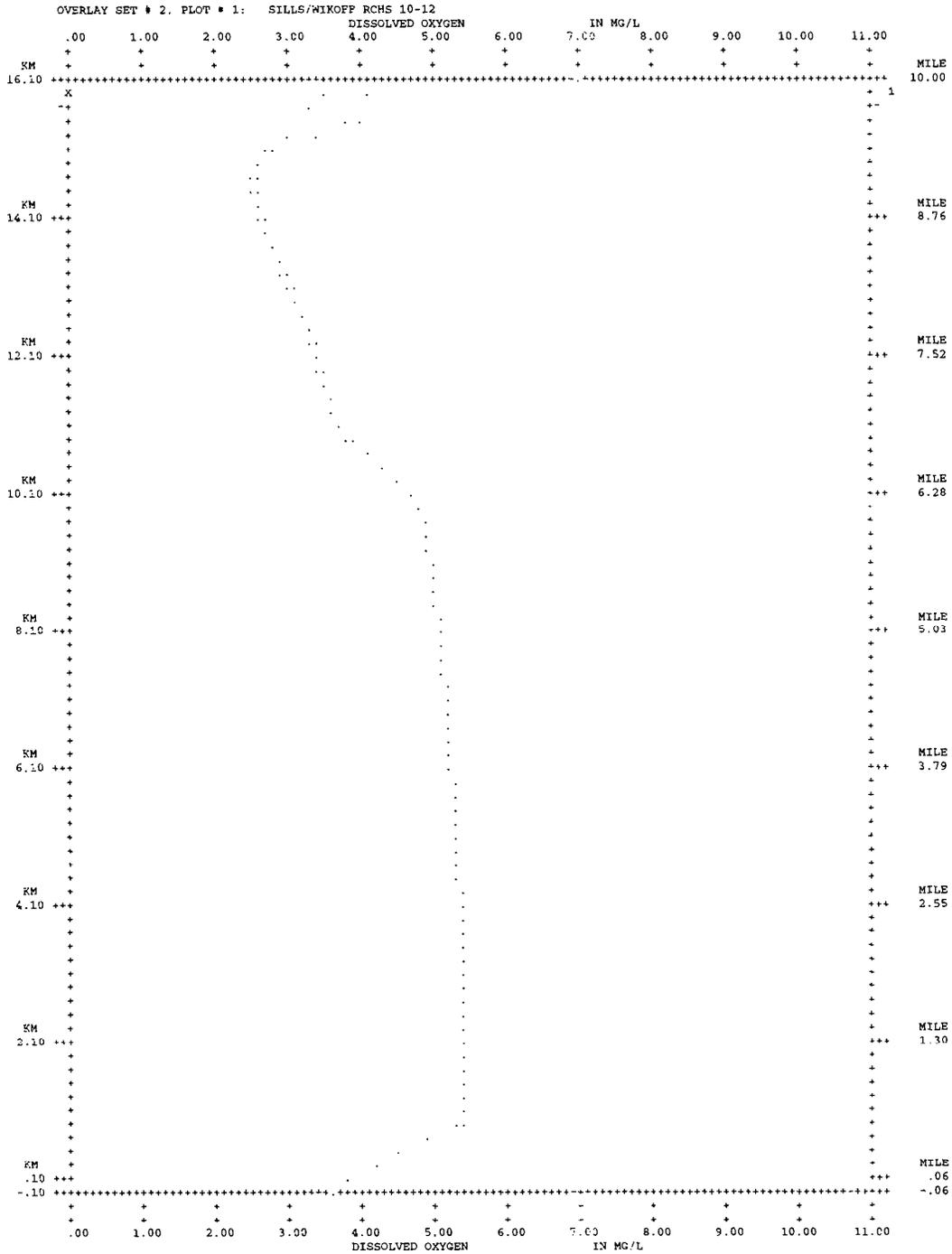
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

OVERLAY SET # 1, PLOT # 3: ATWOOD RCHS 7-8



BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION RUN

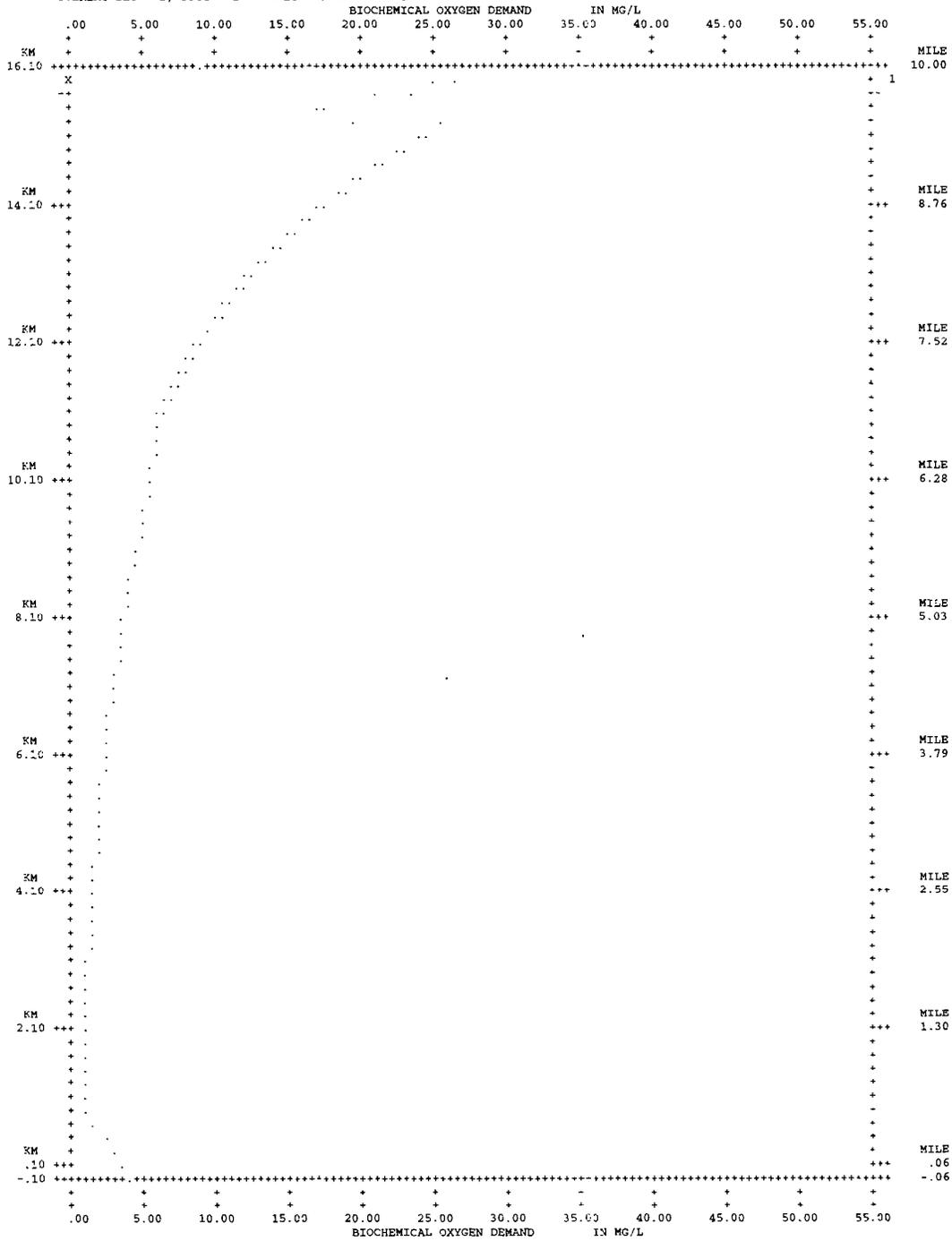
..... = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+-- INDICATES MODEL REACH BOUNDARIES



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

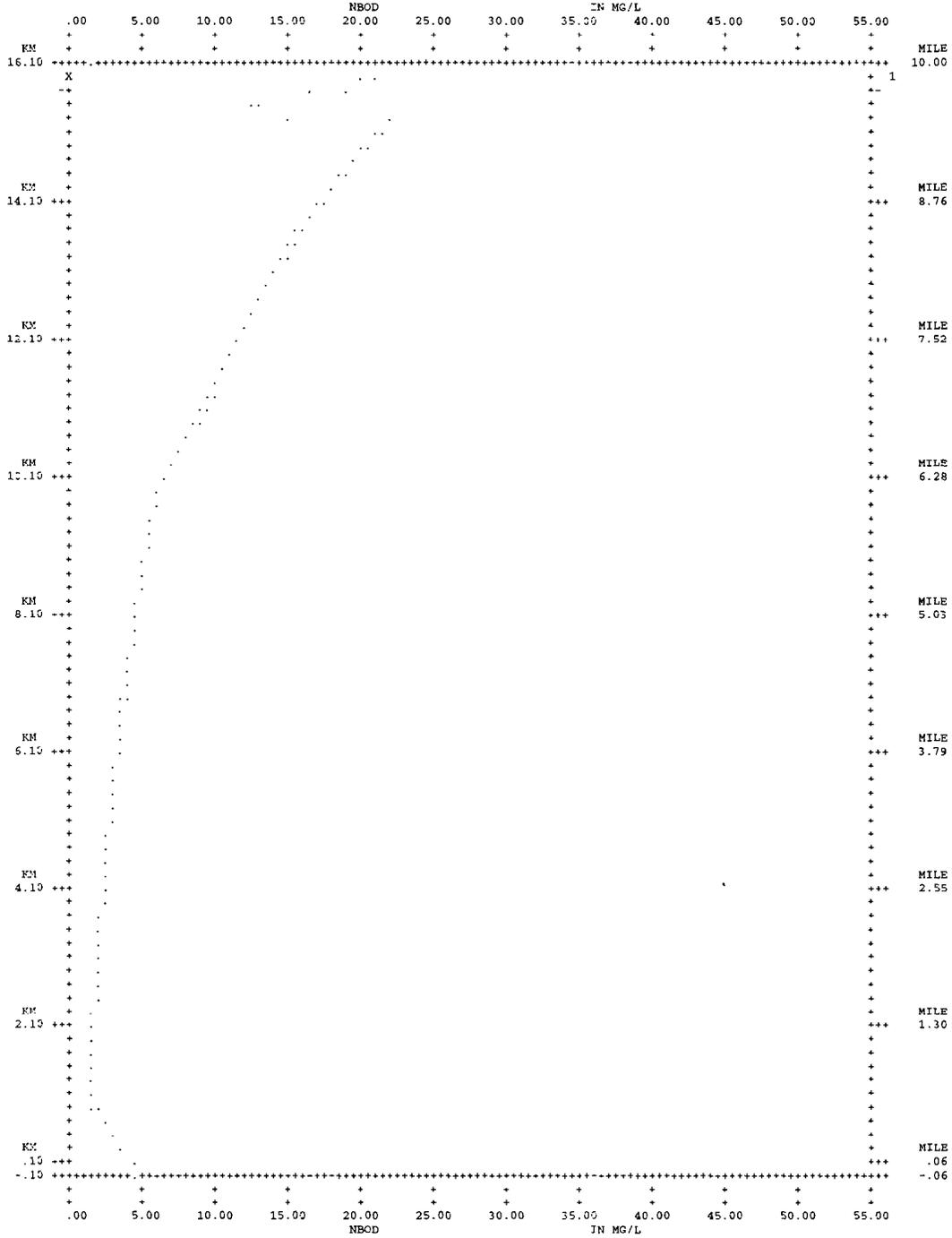
OVERLAY SET # 2, PLOT # 2: SILLS/WIKOFF RCHS 10-12



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

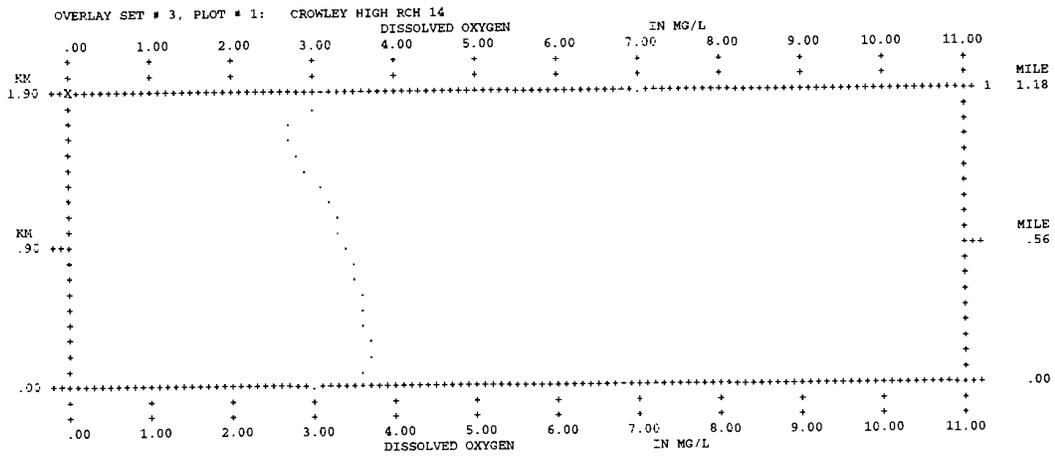
OVERLAY SET # 2, PLOT # 3: SILLS/WIKOFF RCHS 10-12



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

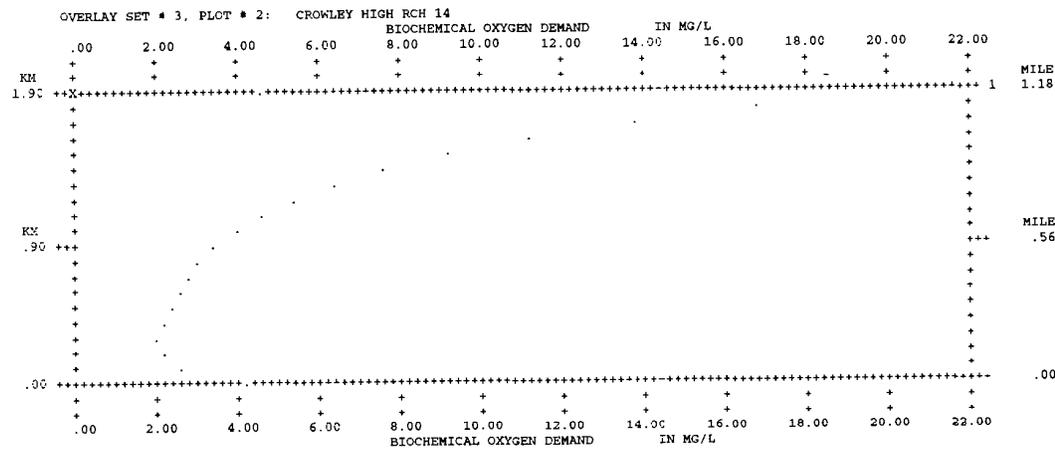
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..... = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

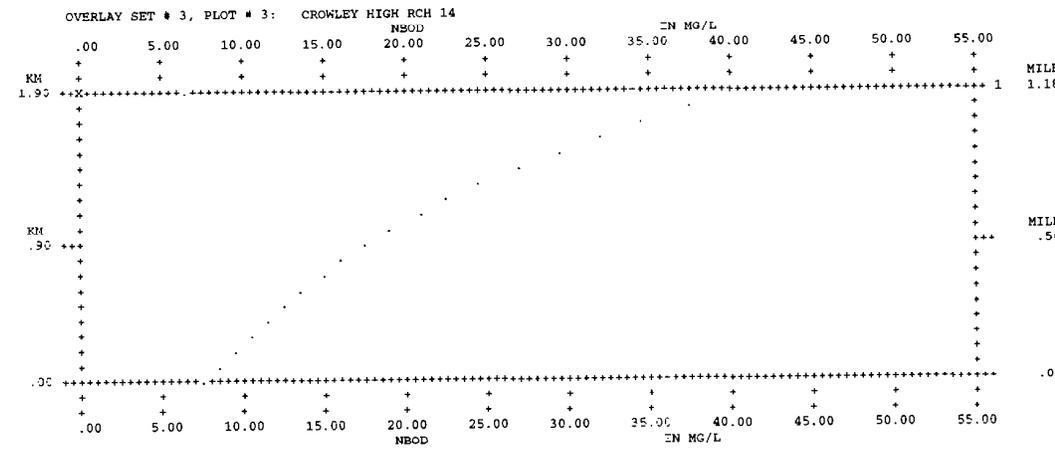
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..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

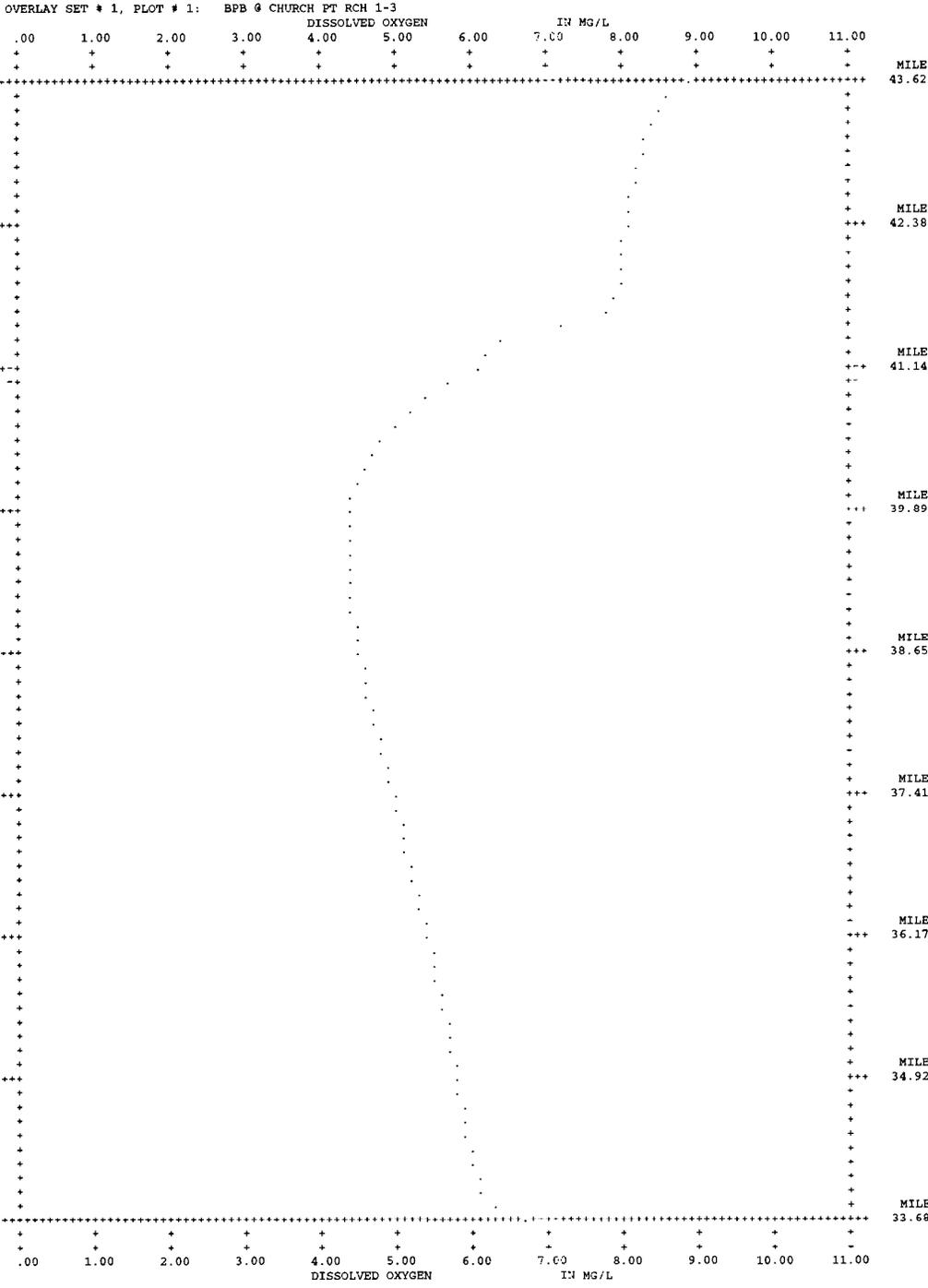
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN

1



..... = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

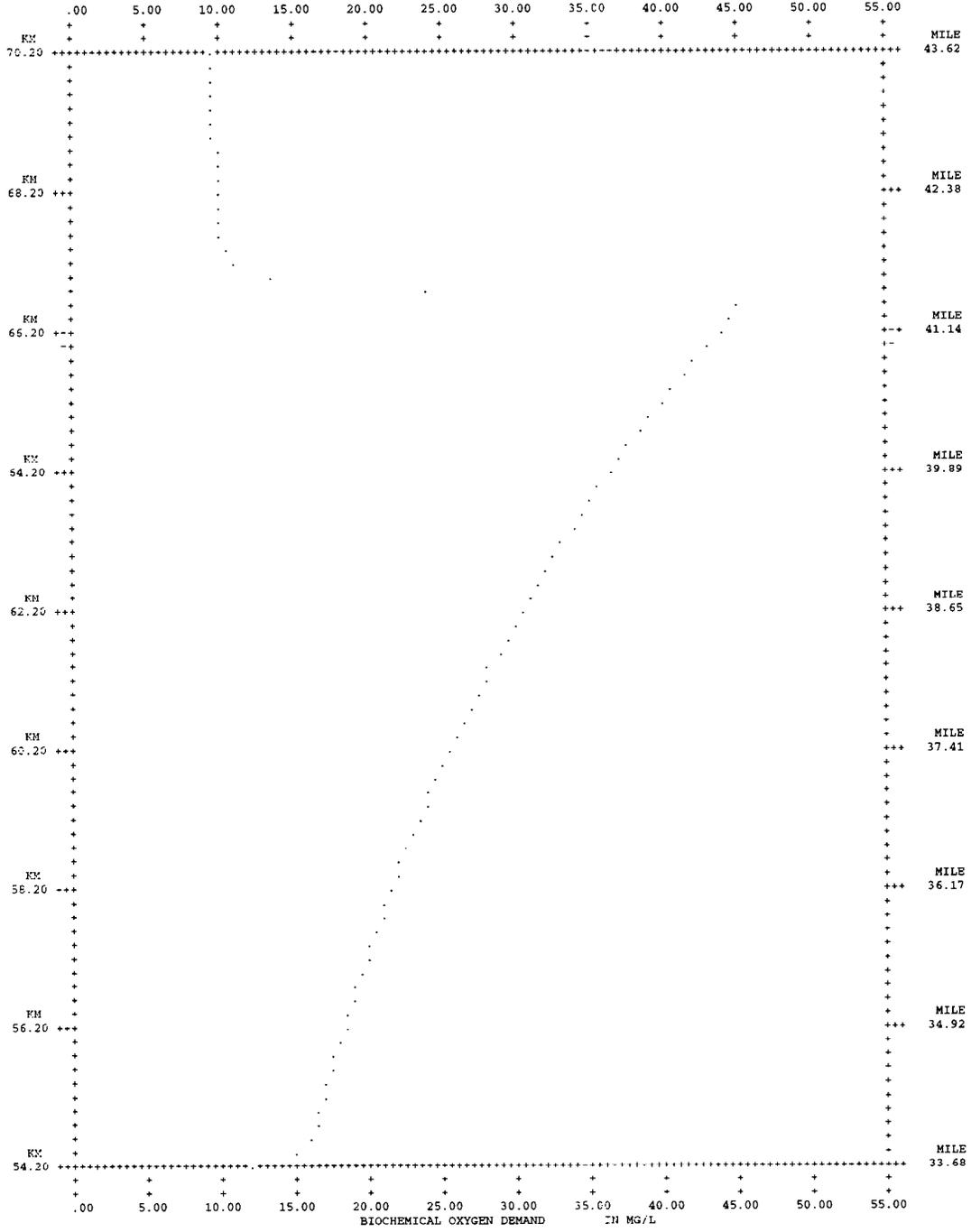
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION RUN



. . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- -- INDICATES MODEL REACH BOUNDARIES

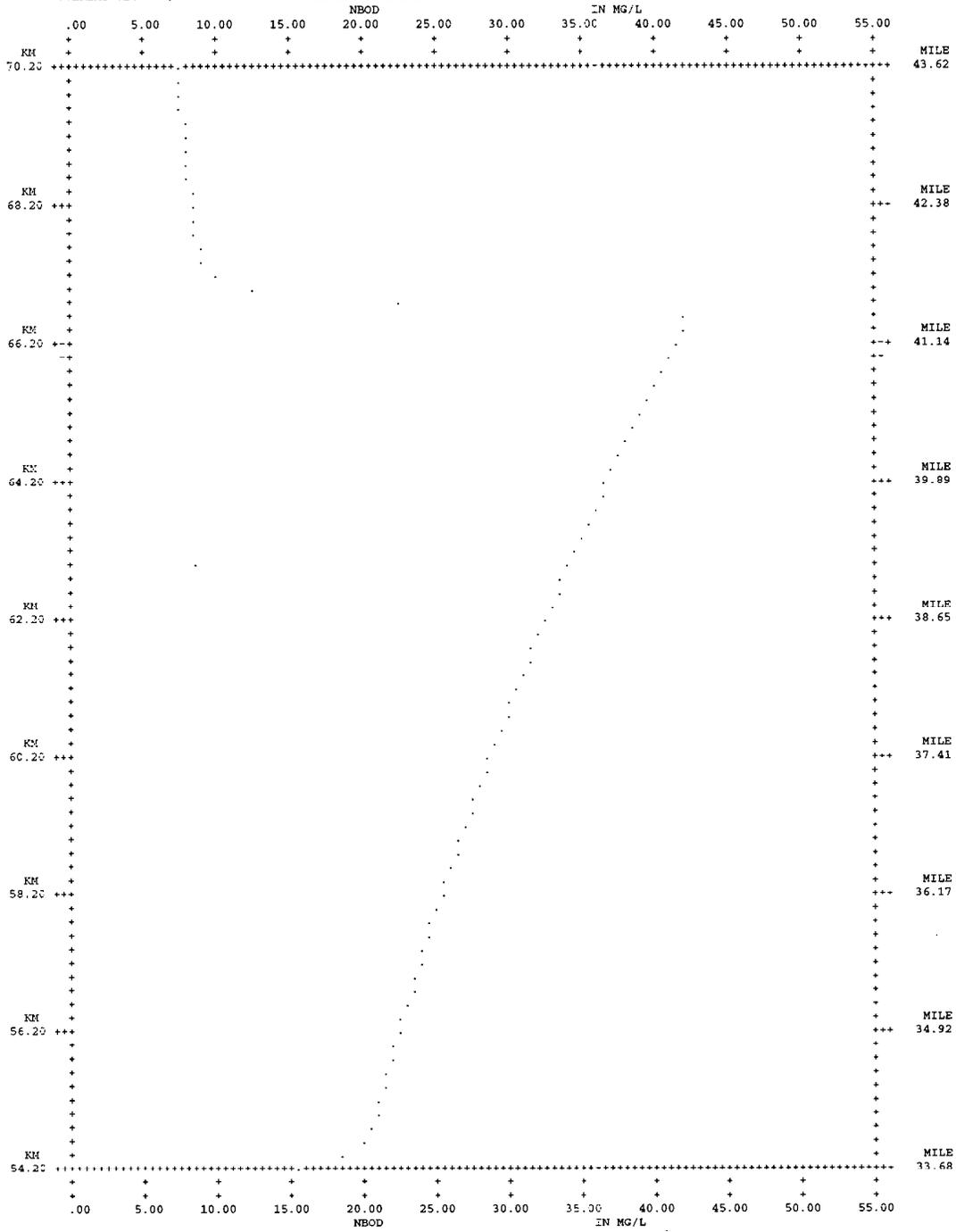
BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

OVERLAY SET # 1, PLOT # 2: BPB @ CHURCH PT RCH 1-3
BIOCHEMICAL OXYGEN DEMAND IN MG/L



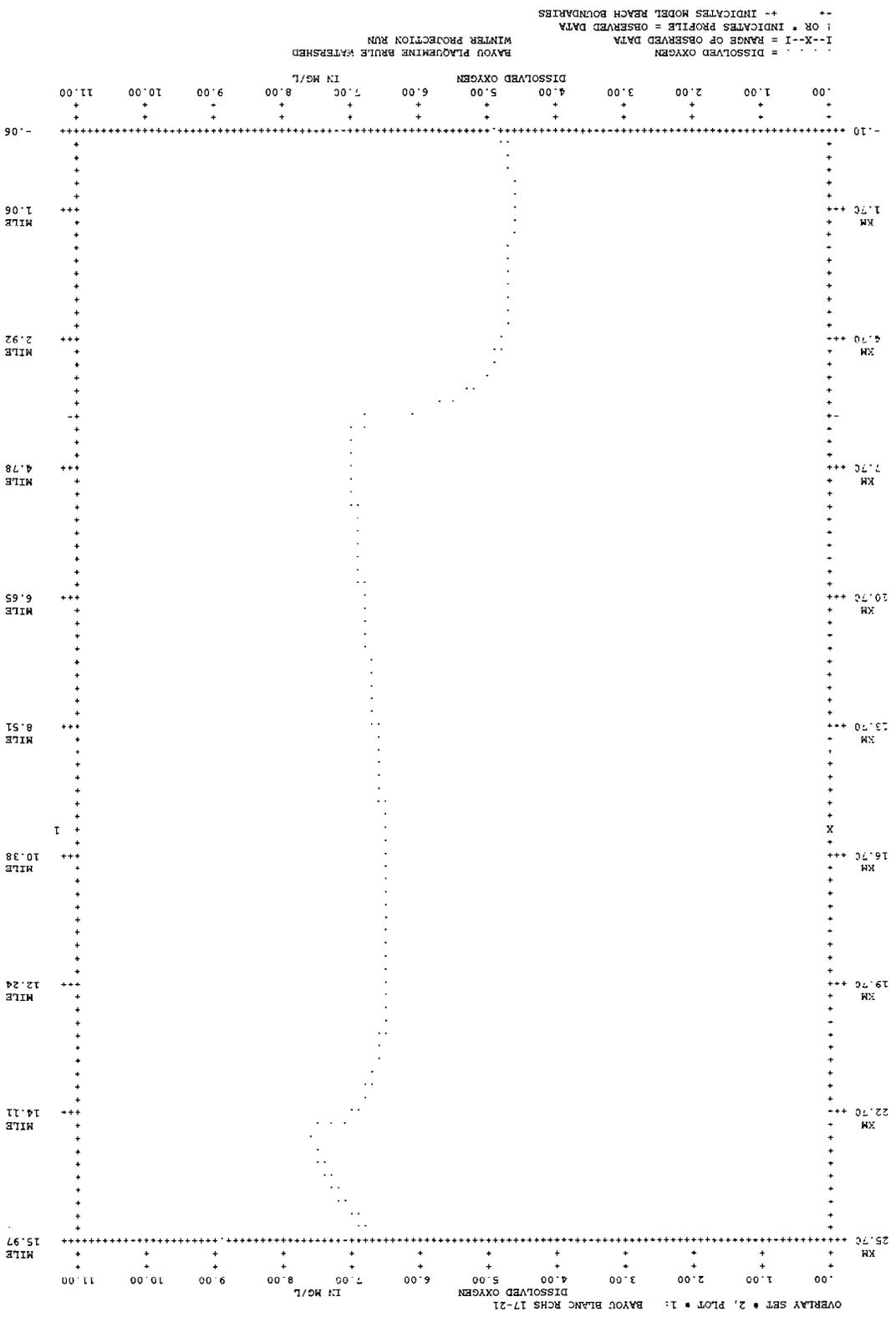
. . . . = BIOCHEMICAL OXYGEN DEMAND BAYOU PLAQUEMINE BRULE WATERSHED
 I--X--I = RANGE OF OBSERVED DATA WINTER PROJECTION RUN
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- -- INDICATES MODEL REACH BOUNDARIES

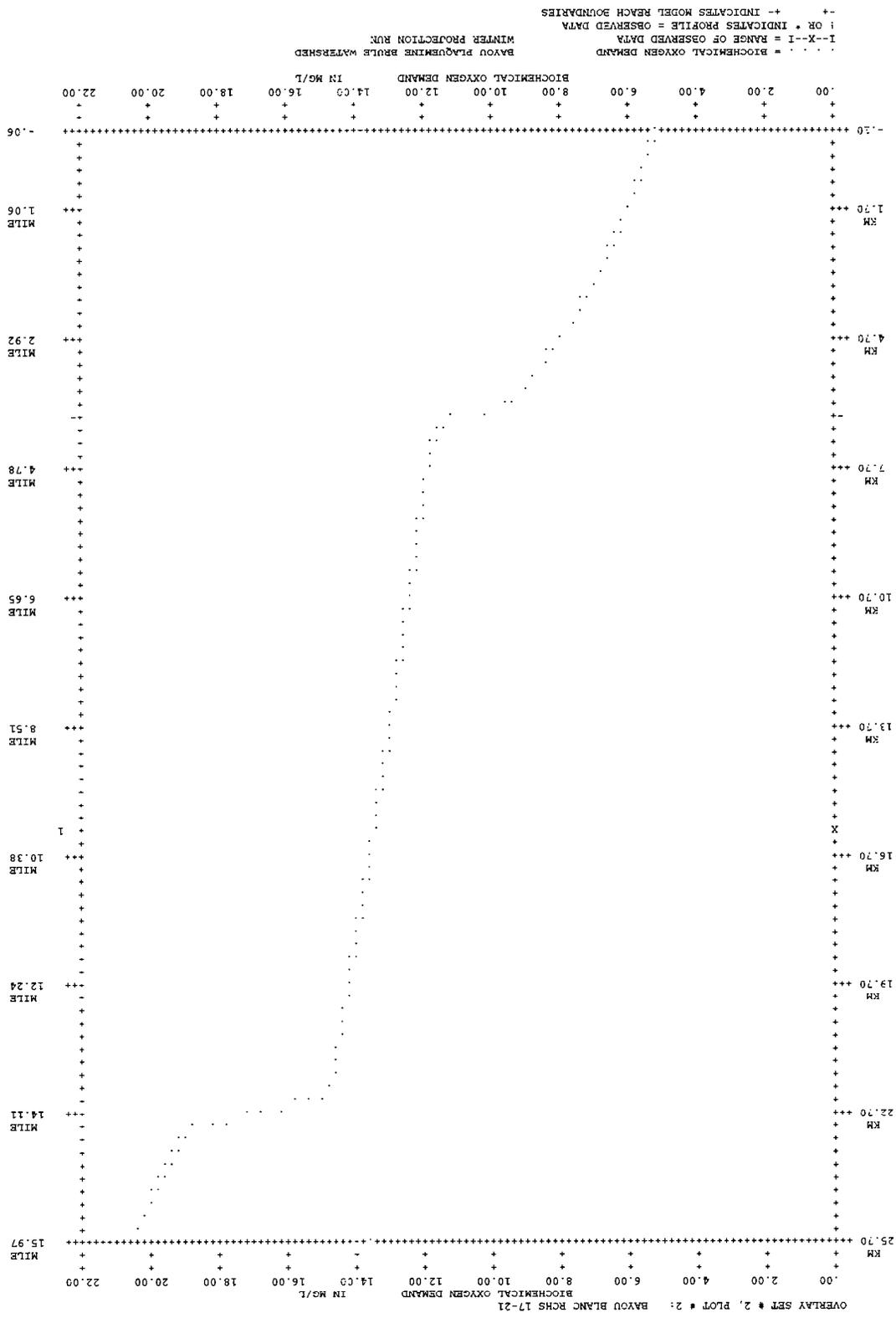
OVERLAY SET * 1, PLOT * 3: BPB @ CHURCH PT RCH 1-3



. . . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -- -- -- -- -- INDICATES MODEL REACH BOUNDARIES

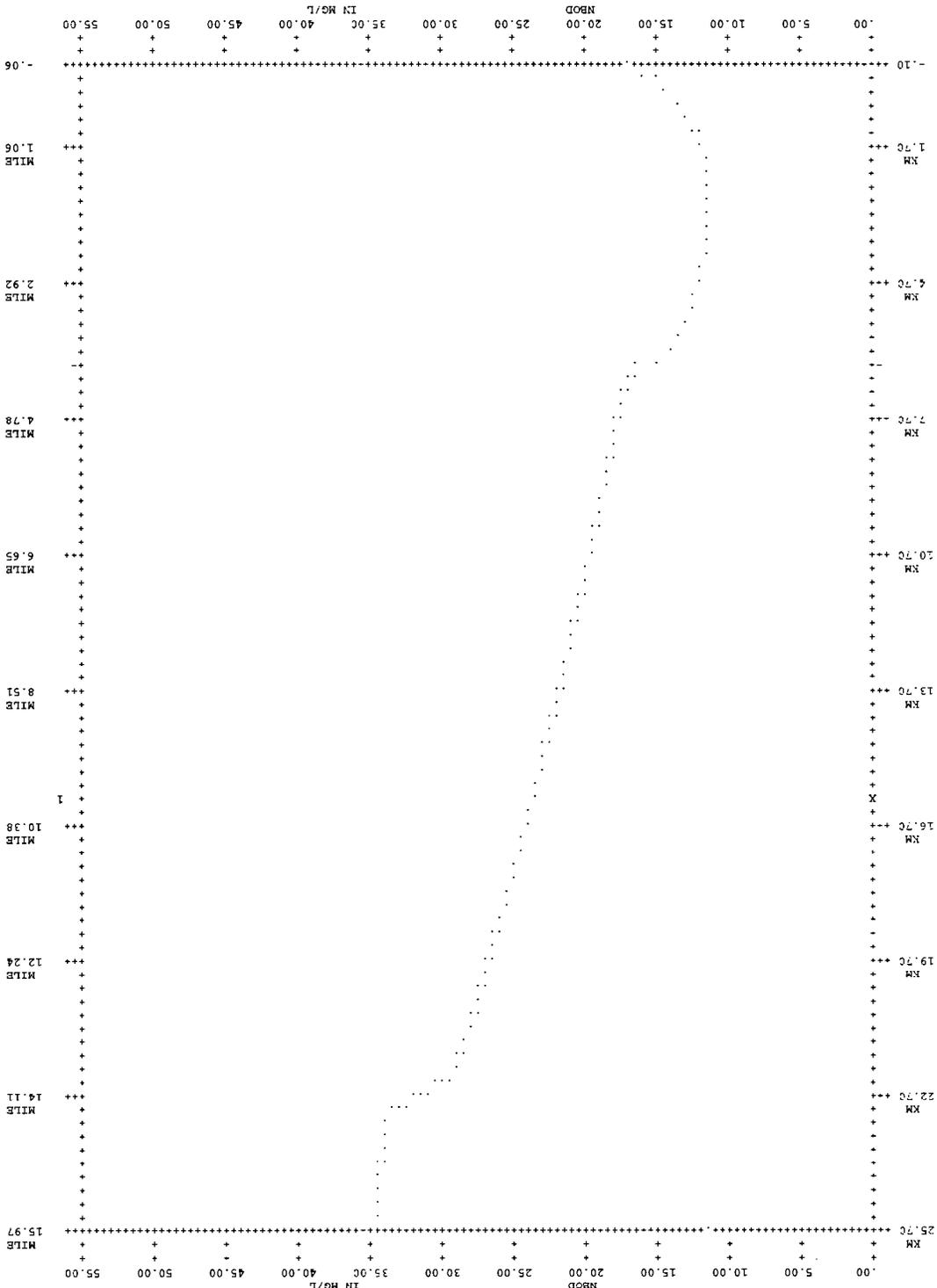
BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN





BAYOU BLANC RCHS 17-21
 WINTER PROJECTION RUN
 BIOCHEMICAL OXYGEN DEMAND
 IN MG/L

OVERLAY SET # 2, PLOT # 3: BAYOU BLANC RCHS 17-21

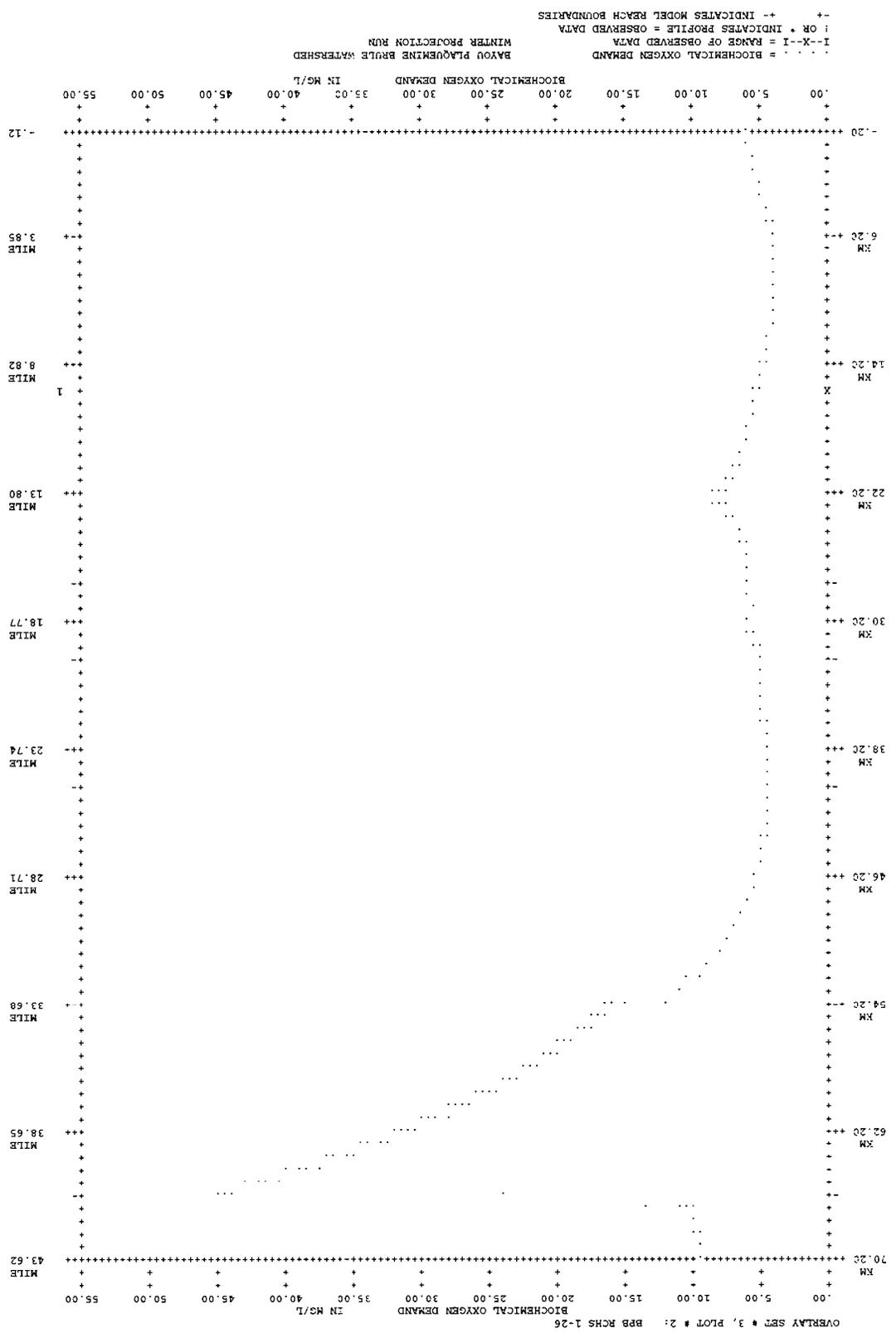


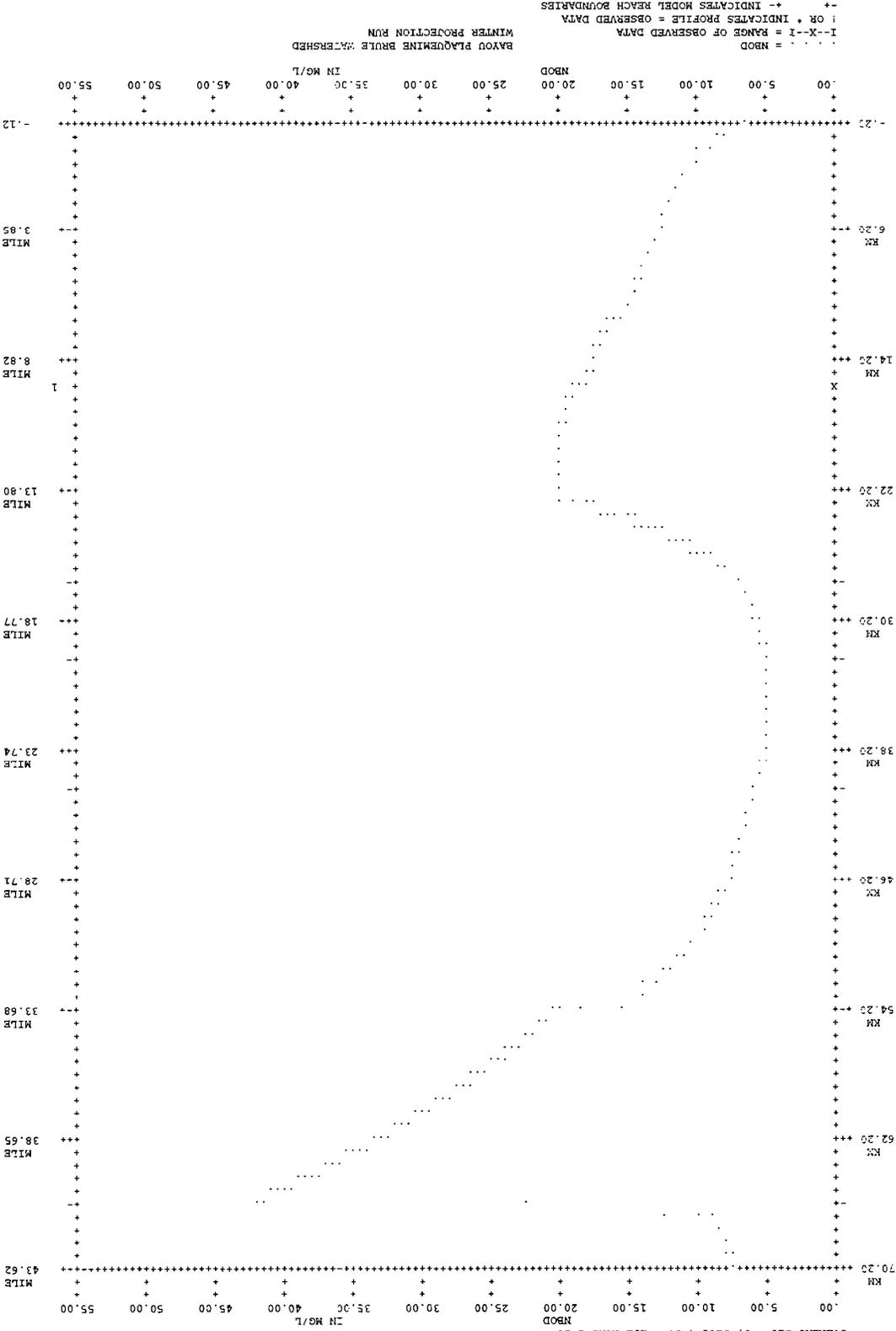
..... = NPOD
I-X-I = RANGE OF OBSERVED DATA
I OR * INDICATES PROFILE = OBSERVED DATA
+- INDICATES MODEL REACH BOUNDARIES

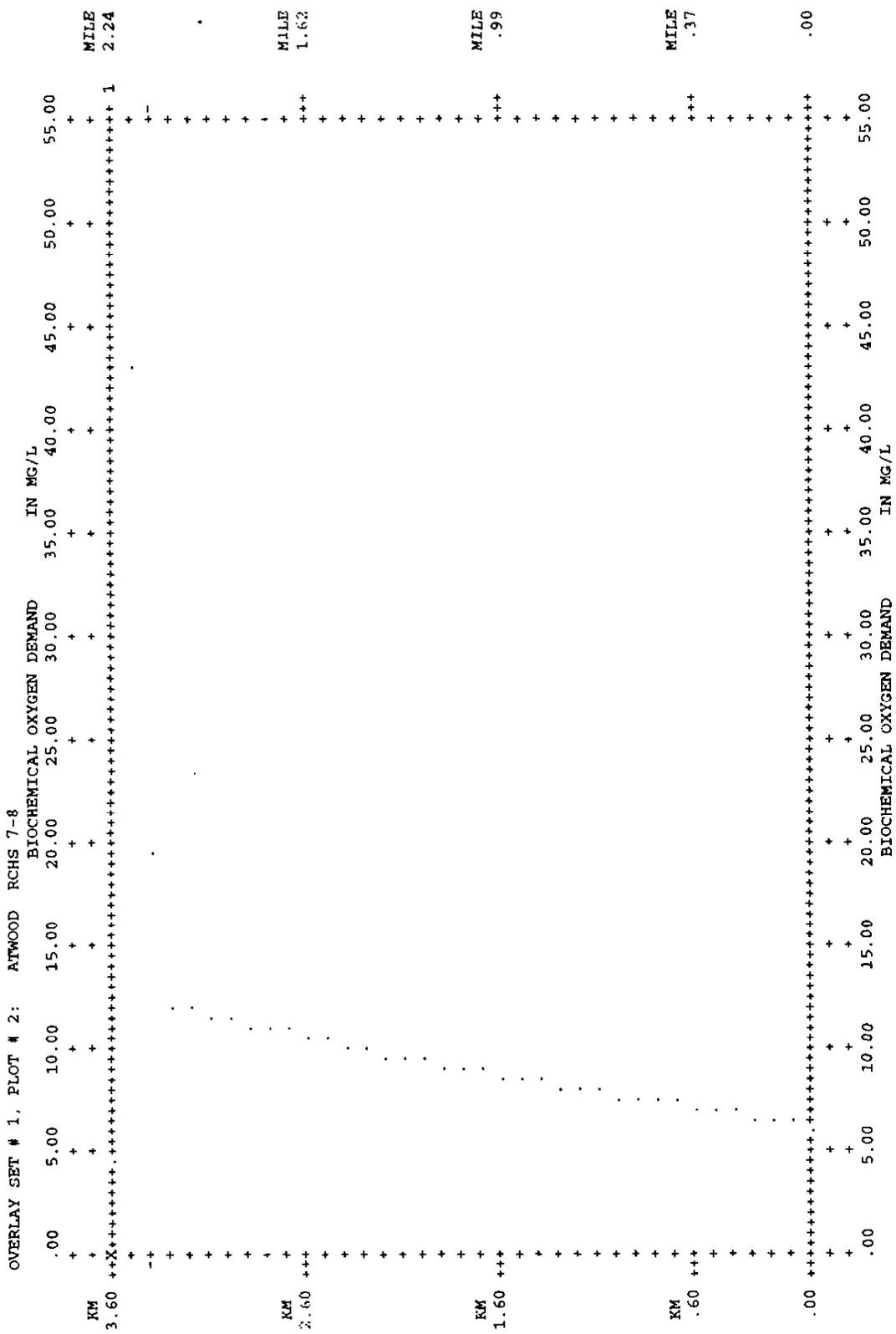
BAYOU BLANC RCHS 17-21
WINTER PROTECTION RUN

IN MG/L

NPOD



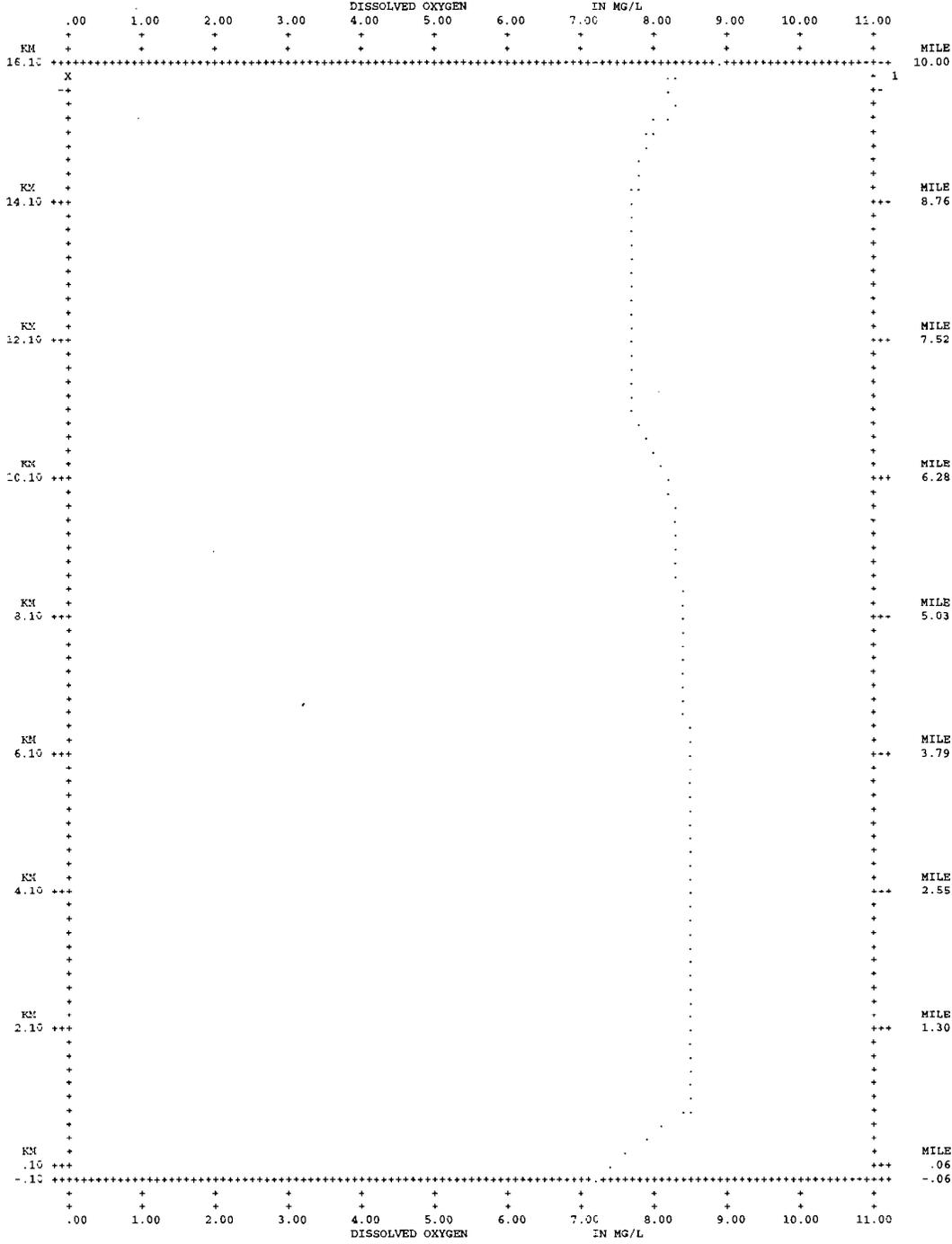




..... = BIOCHEMICAL OXYGEN DEMAND
 I-X-I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

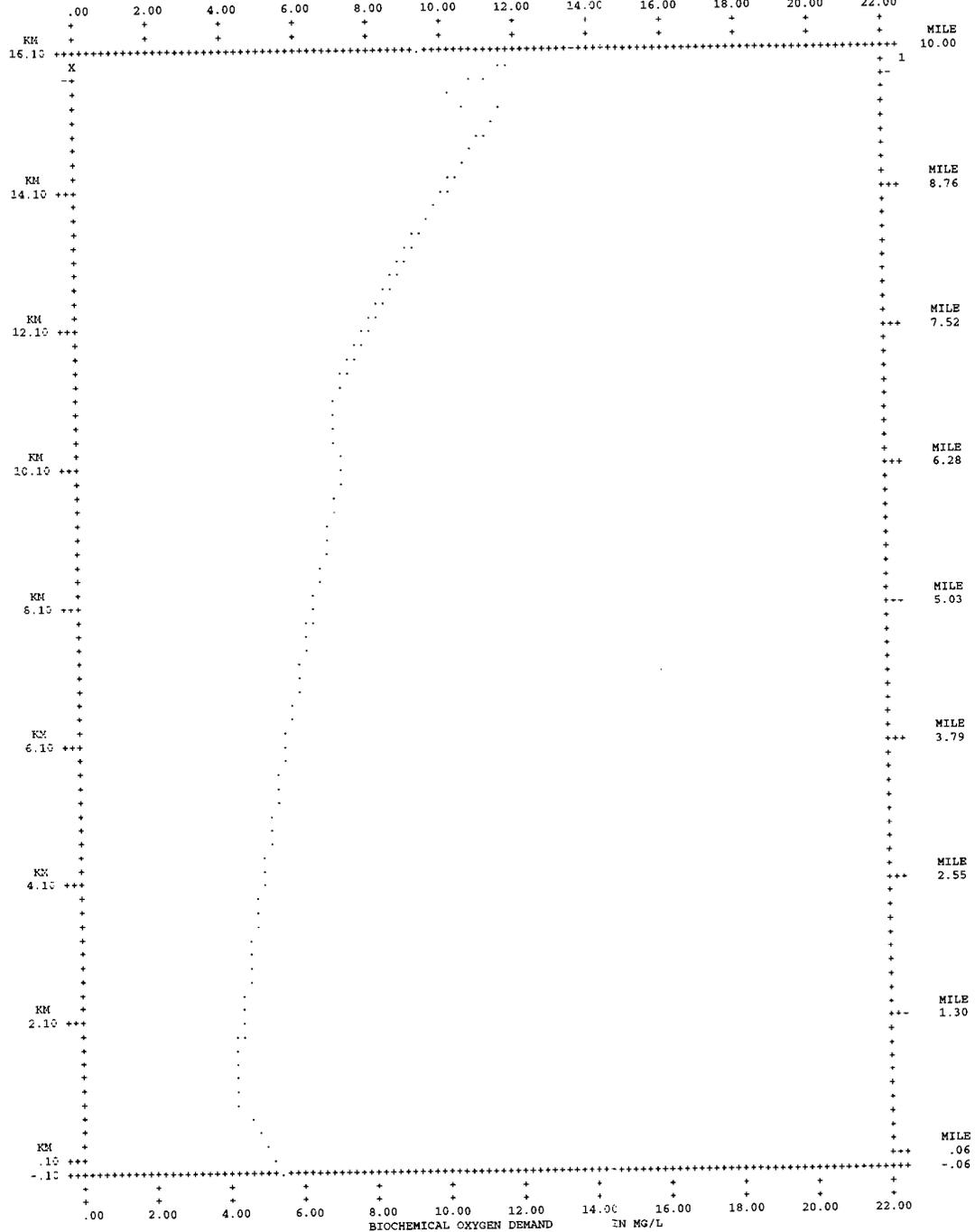
OVERLAY SET # 2, PLOT # 1; SILLS/WIKOFF RCHS 10-12



. . . = DISSOLVED OXYGEN
 I-X-I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
WINTER PROJECTION RUN

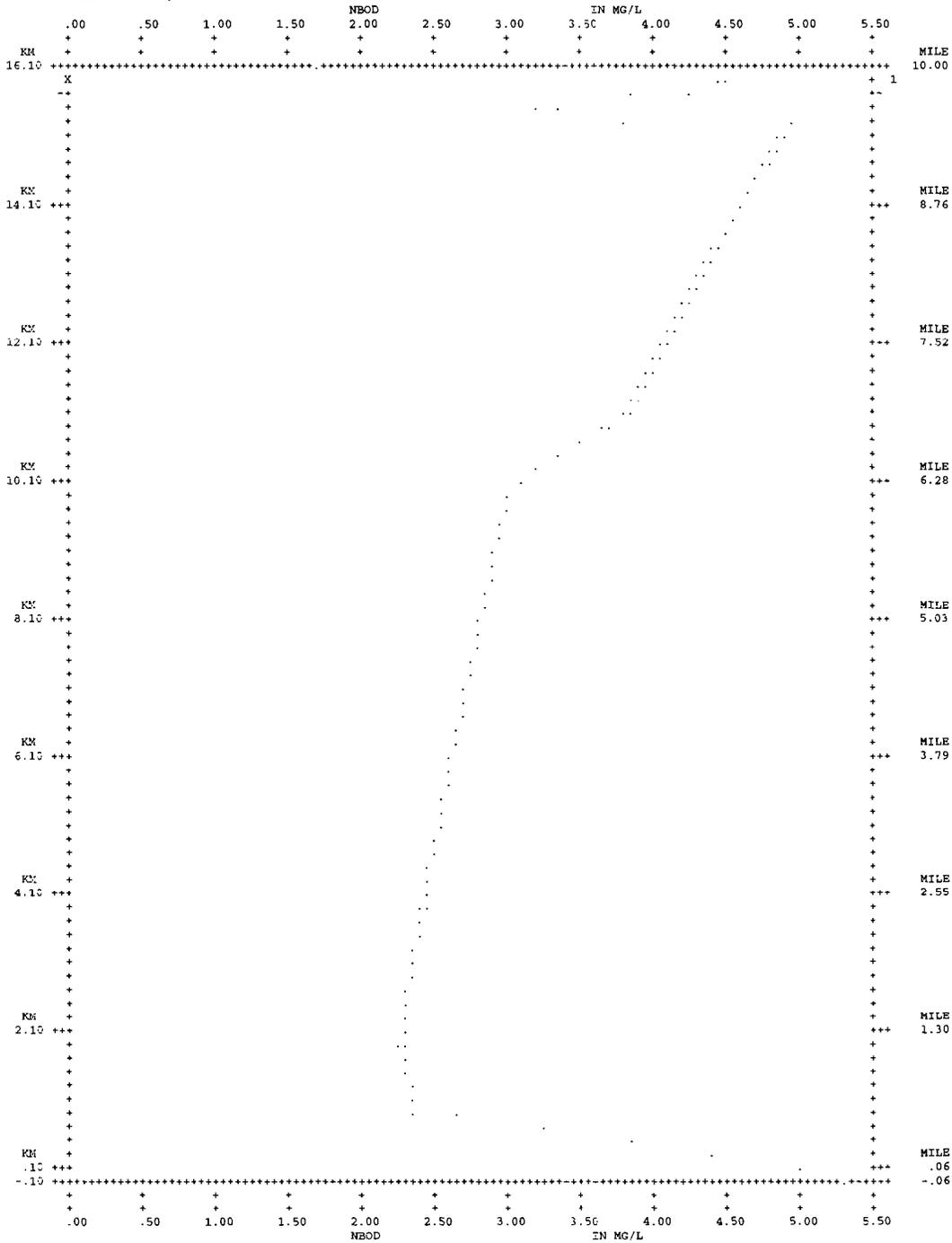
OVERLAY SET # 2, PLOT # 2: SILLS/MIKOFF RCHS 10-12
BIOCHEMICAL OXYGEN DEMAND EN MG/L



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

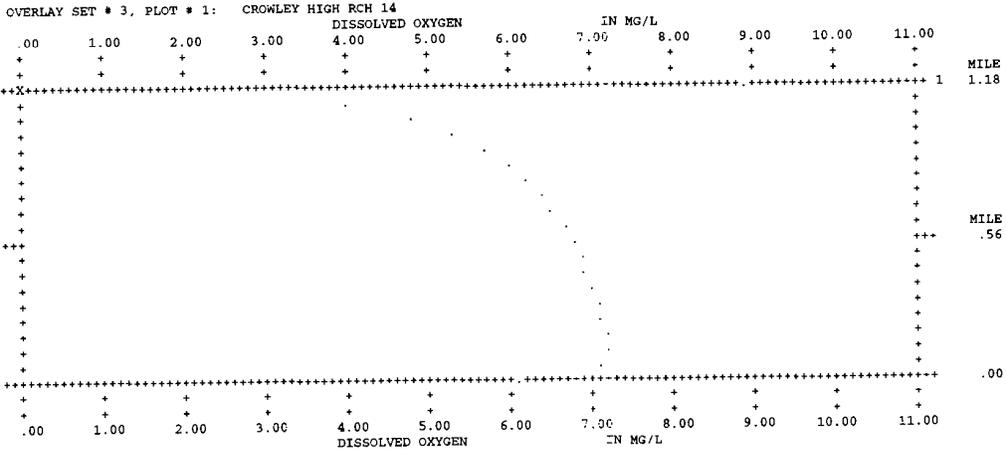
OVERLAY SET # 2, PLOT # 3: SILLS/WIKOFF RCHS 10-12



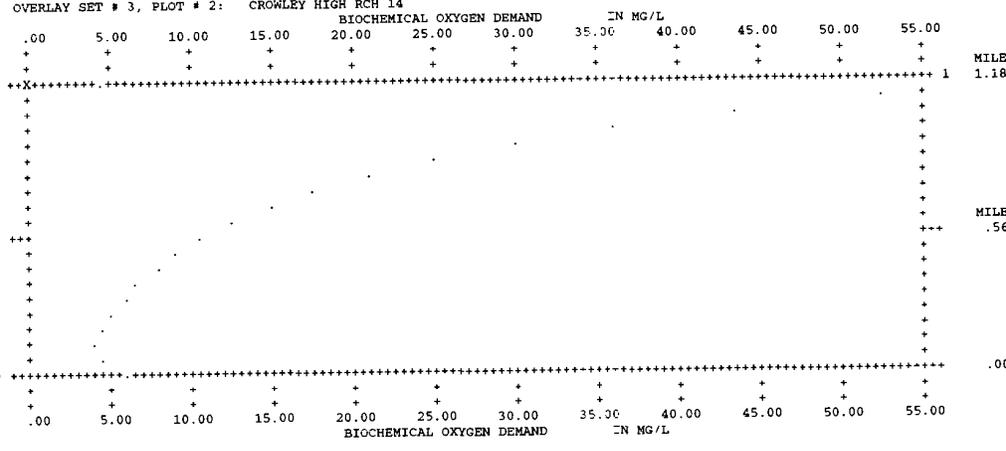
. . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 WINTER PROJECTION RUN

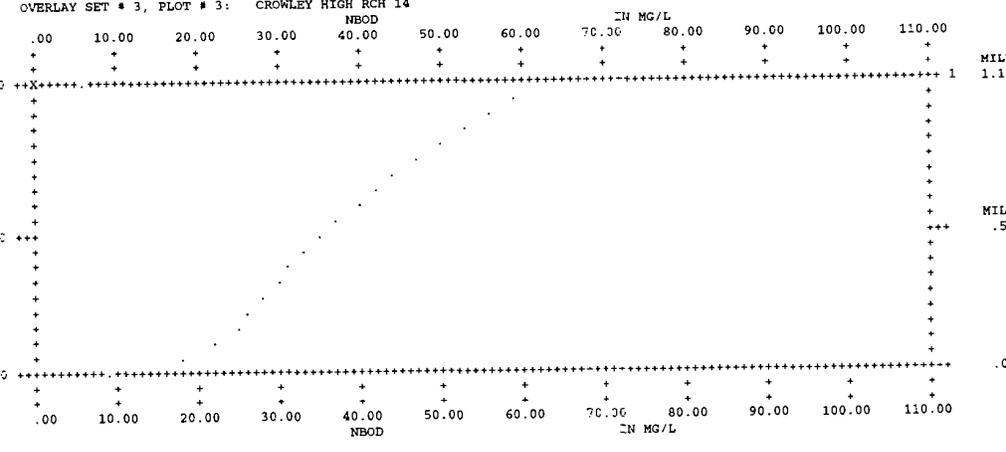
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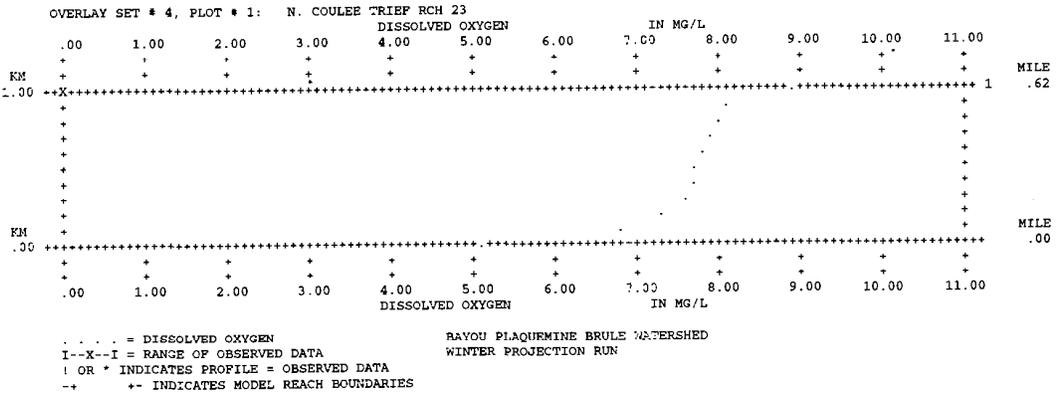
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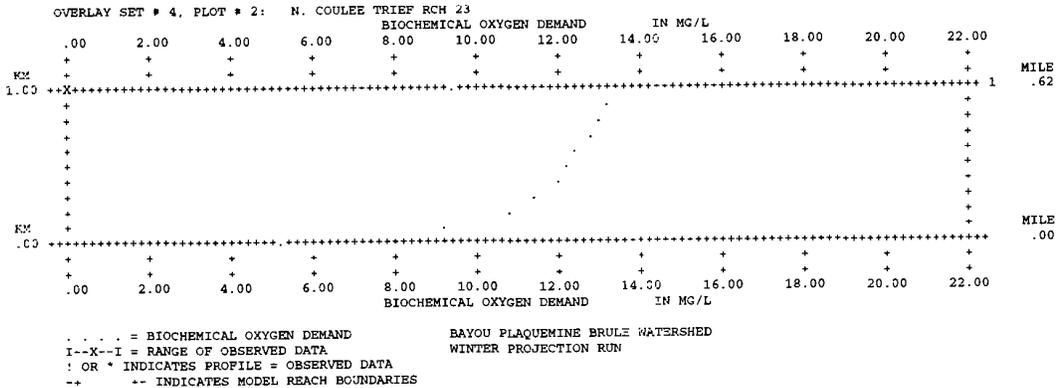
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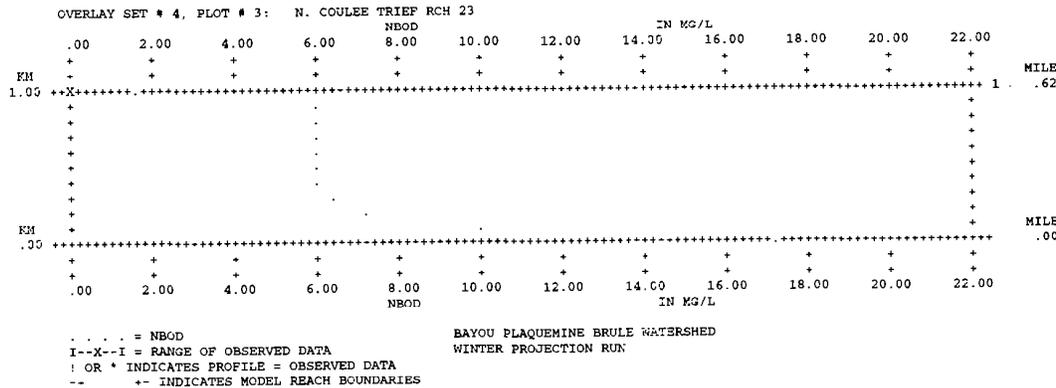
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1



APPENDIX F – WATER QUALITY SUMMER NO-LOAD PROJECTIONS

BenLoad10.xls / Sum NO-load NP - Benthic Loading for Summer No-load Projection

ProjDat7.xls / No-load K2 - Reaeration Data for Summer No-load Projections

SPRNLBpl.doc - Word file from which 9 plots were printed

BPB @ Church Pt Rch 1-3

Bayou Blanc Rchs 17-21

BPB Rchs 1-26

SPRNLApl.doc - Word file from which 12 plots were printed

Atwood Rchs 7-8

Sills/Wikoff Rchs 10-12

Crowley High Rch 14

N. Coulee Trief Rch 23

BAYOU PLAQUEMINE BRUJE BENTHIC LOADING FOR SUMMER NO-LOAD PROJECTION

Reach number	Reach length (km)	Reach width (m)	Cal NP CBOD (kgmvd)	Cal NP NBOD (kgmvd)	Cal NP CBOD (gm/m ² -d)	Cal NP NBOD (gm/m ² -d)	Cal SOD @ 20 °C (gm/m ² -d)	Cal SOD at 20 °C (gm/m ² -d)	Cal Benthic at 20 °C (gm/m ² -d)	20 °C Natural background load (gm/m ² -d)	Est. No-load CBOD load (kgmvd)	Est. No-load NBOD (kgmvd)
1	4	1.5	15.00	10.00	2.500	1.667	2.0	2.0	6.17	0.40	0.27	2.41
2	0.2	7.4	0.70	0.00	0.473	0.000	2.4	2.4	2.87	0.16	0.16	0.24
3	11.8	7.4	39.30	0.00	0.450	0.000	2.4	2.85	2.85	0.16	0.16	13.65
4	14	12	200.00	150.00	1.190	0.893	1.8	3.88	3.88	0.23	0.46	50.99
5	8	28.9	680.00	600.00	2.941	2.595	0.5	6.04	6.04	0.86	0.17	225.30
6	0.8	30	80.00	100.00	3.333	4.167	0.5	8.00	8.00	1.04	0.13	20.00
7	0.2	7.8	0.00	0.00	0.000	0.000	2.4	2.40	2.40	0.16	0.67	0.25
8	3.4	5.1	4.00	2.00	0.231	0.115	1.2	1.55	1.55	0.07	0.77	2.56
9	1.1	26	80.00	100.00	2.797	3.497	0.5	6.79	6.79	1.03	0.15	23.55
10	0.4	2	0.00	0.00	0.000	0.000	2.4	2.40	2.40	0.16	0.67	0.13
11	4.7	2.5	0.00	0.00	0.000	0.000	2.4	2.40	2.40	0.16	0.67	1.88
12	11	2.7	0.00	0.00	0.000	0.000	1.2	1.20	1.20	0.16	0.67	4.75
13	3.2	35.1	418.00	400.00	3.722	3.561	0.5	7.78	7.78	0.92	0.13	107.42
14	1.9	3.4	2.00	0.00	0.310	0.000	2.4	2.71	2.71	0.11	0.77	0.71
15	5.4	34.3	615.00	325.00	3.320	1.755	0.0	5.08	5.08	1.31	0.69	242.36
16	6.4	40.3	707.00	374.00	2.741	1.450	0.0	4.19	4.19	1.31	0.69	337.37
17	2.5	3.7	0.00	0.00	0.000	0.000	3.0	3.00	3.00	0.02	0.95	0.19
18	0.4	39.2	0.00	0.00	0.000	0.000	1.0	1.00	1.00	0.11	0.77	1.72
19	0.5	39.2	0.00	0.00	0.000	0.000	1.0	1.00	1.00	0.11	0.77	2.16
20	15.9	5.1	0.00	0.00	0.000	0.000	1.0	1.00	1.00	0.02	0.04	1.62
21	6.4	20	40.00	200.00	0.313	1.563	1.0	2.88	2.88	1.09	0.70	27.83
22	0.5	50	55.00	100.00	2.200	4.000	0.0	6.20	6.20	0.71	1.29	17.74
23	1	2.3	0.00	0.00	0.000	0.000	2.4	2.40	2.40	0.16	0.67	0.37
24	2.8	47.8	385.00	270.00	2.877	2.017	0.0	4.89	4.89	1.18	0.82	157.34
25	6	63.5	1250.00	300.00	3.281	0.787	0.0	4.07	4.07	1.61	0.39	614.52
26	6	51.8	1250.00	300.00	4.022	0.965	0.0	4.99	4.99	1.61	0.39	501.29
												120.31

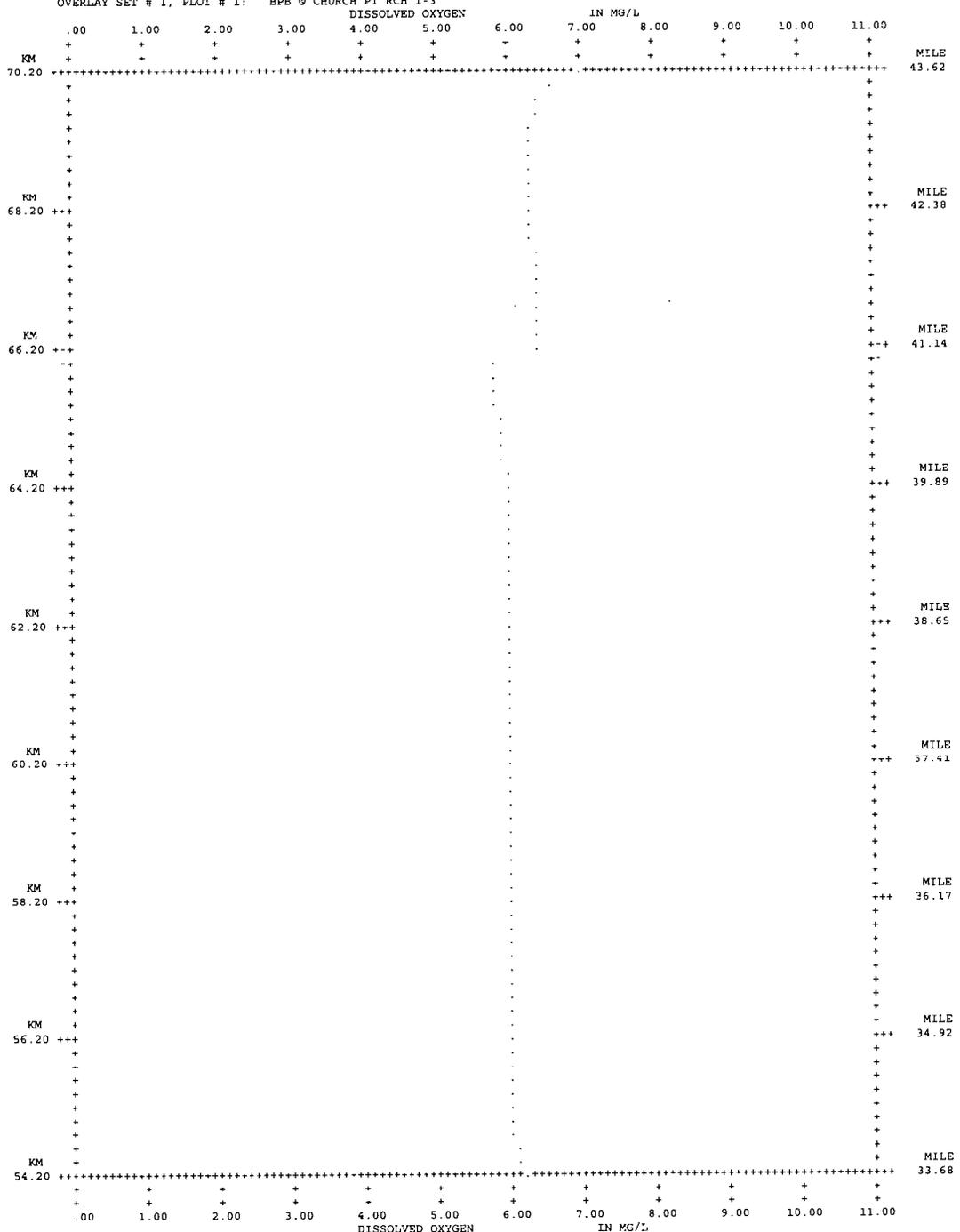
The calibration CBOD, NBOD, and SOD are reduced by the ratio of calibration benthic load to natural background benthic load to get the no (man-made) load CBOD, NBOD, and SOD; except that zero CBOD and NBOD were not allowed. Where the calibration CBOD or NBOD were zero a small load was input and the SOD adjusted downward so that the sum of the natural background CBOD, NBOD, and SOD equaled the total background benthic.

BAYOU PLAQUEMINE BRULE

Reaeration data for summer no-load projections

Reach	Stream	Summer flow (cms)	Summer width (m)	Summer depth (m)	Summer velocity (m/s)	Summer $L_a K_a$
1	BPB	0.0028	1.5	0.22	0.00848	3.19
2	BPB	0.0028	7.4	0.44	0.00086	1.52
3	BPB	0.0028	7.4	0.44	0.00086	1.52
4	BPB	0.0057	12	0.86	0.00055	0.78
5	BPB	0.0085	28.9	2.07	0.00014	0.32
6	BPB	0.0113	30	2.14	0.00018	0.31
7	AG	0.0028	8.2	0.25	0.00137	2.68
8	AB	0.0057	5.3	0.24	0.00448	2.85
9	BPB	0.017	26	1.86	0.00035	0.36
10	SG	0.0028	1.6	0.20	0.00875	3.51
11	SB	0.0057	2	0.21	0.01357	3.45
12	BW	0.0085	2.3	0.24	0.01540	3.05
13	BPB	0.0255	35.1	2.50	0.00029	0.27
14	CHG	0.0028	5.1	0.24	0.00229	2.81
15	BPB	0.0283	34.3	2.83	0.00029	0.24
16	BPB	0.0283	40.3	2.85	0.00025	0.23
17	BB	0.0028	0.5	0.17	0.03294	4.75
18	BB	0.0028	39.2	0.30	0.00024	2.22
19	BB	0.0028	39.2	0.30	0.00024	2.22
20	BB	0.0028	1	0.25	0.01120	2.85
21	BB	0.0028	20	1.43	0.00010	0.47
22	BPB	0.0311	50	3.57	0.00017	0.19
23	NCT	0.0028	1.7	0.20	0.00824	3.50
24	BPB	0.034	47.8	3.43	0.00021	0.19
25	BPB	0.034	63.5	4.50	0.00012	0.15
26	BPB	0.0368	51.8	3.71	0.00019	0.18

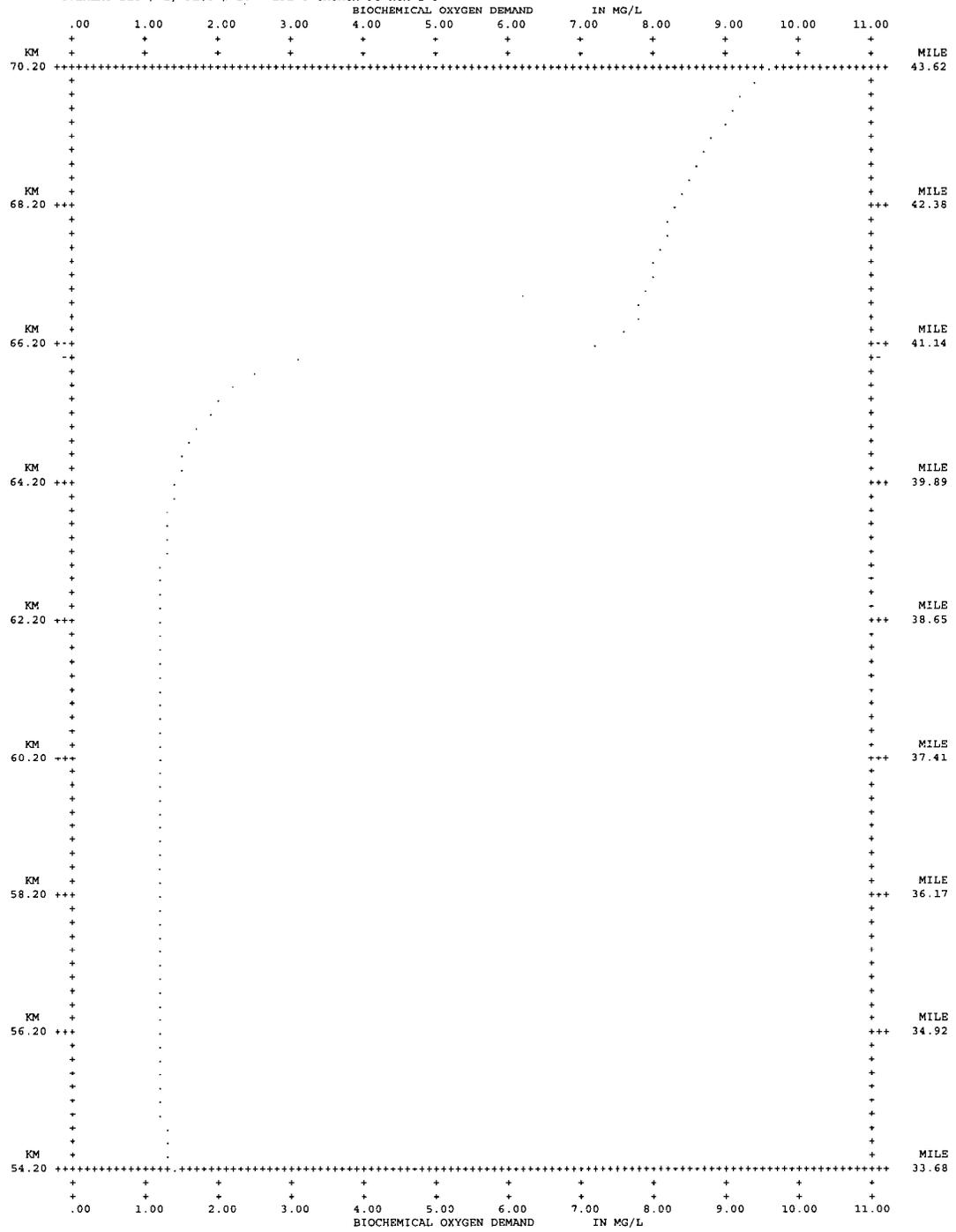
OVERLAY SET # 1, PLOT # 1: BPB @ CHURCH PT RCH 1-3



. . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR ^ INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

HAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

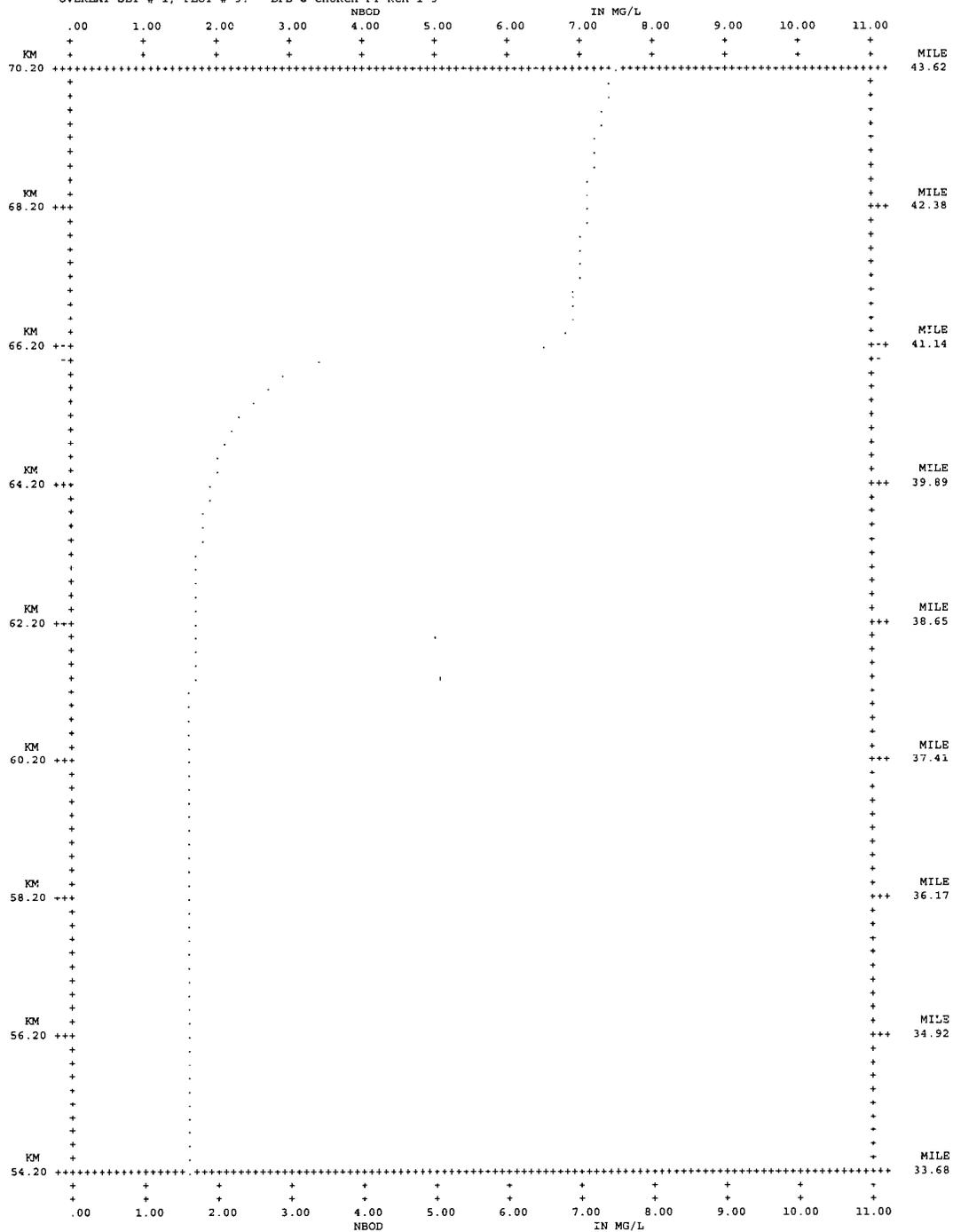
OVERLAY SET # 1, PLOT # 2: BPB @ CHURCH PT RCH 1-3



. . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

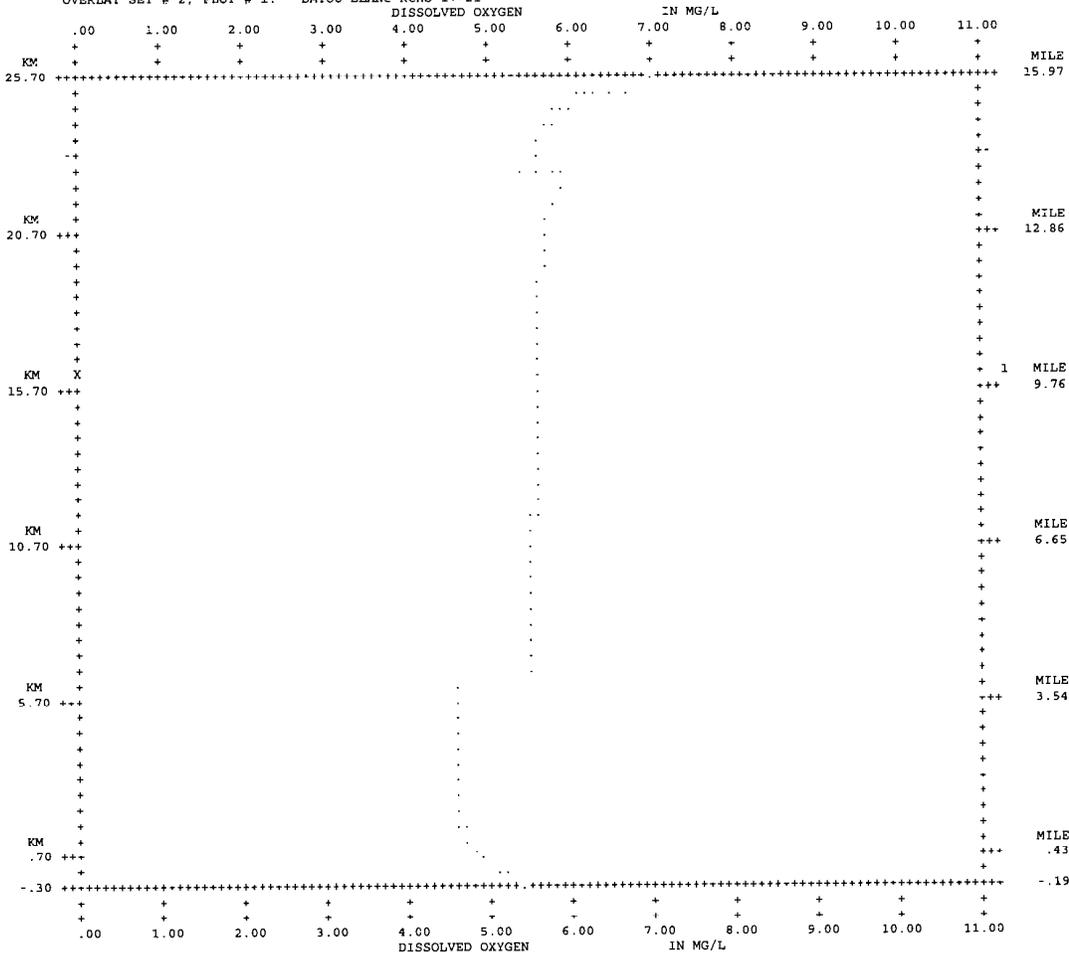
OVERLAY SET # 1, PLOT # 3: BPB @ CHURCH PT RCH 1-3



. . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 : OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

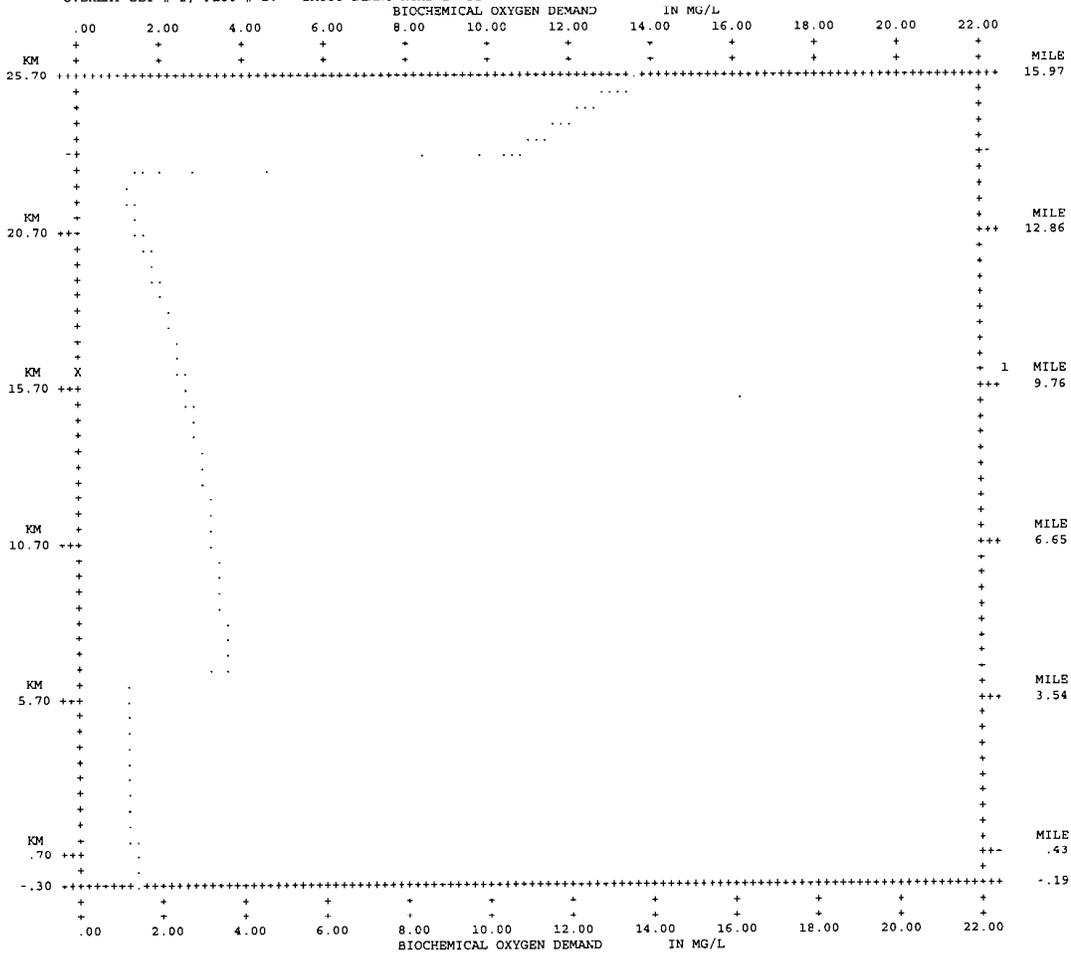
OVERLAY SET # 2, PLOT # 1: BAYOU BLANC RCHS 17-21



. . . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ --+ INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

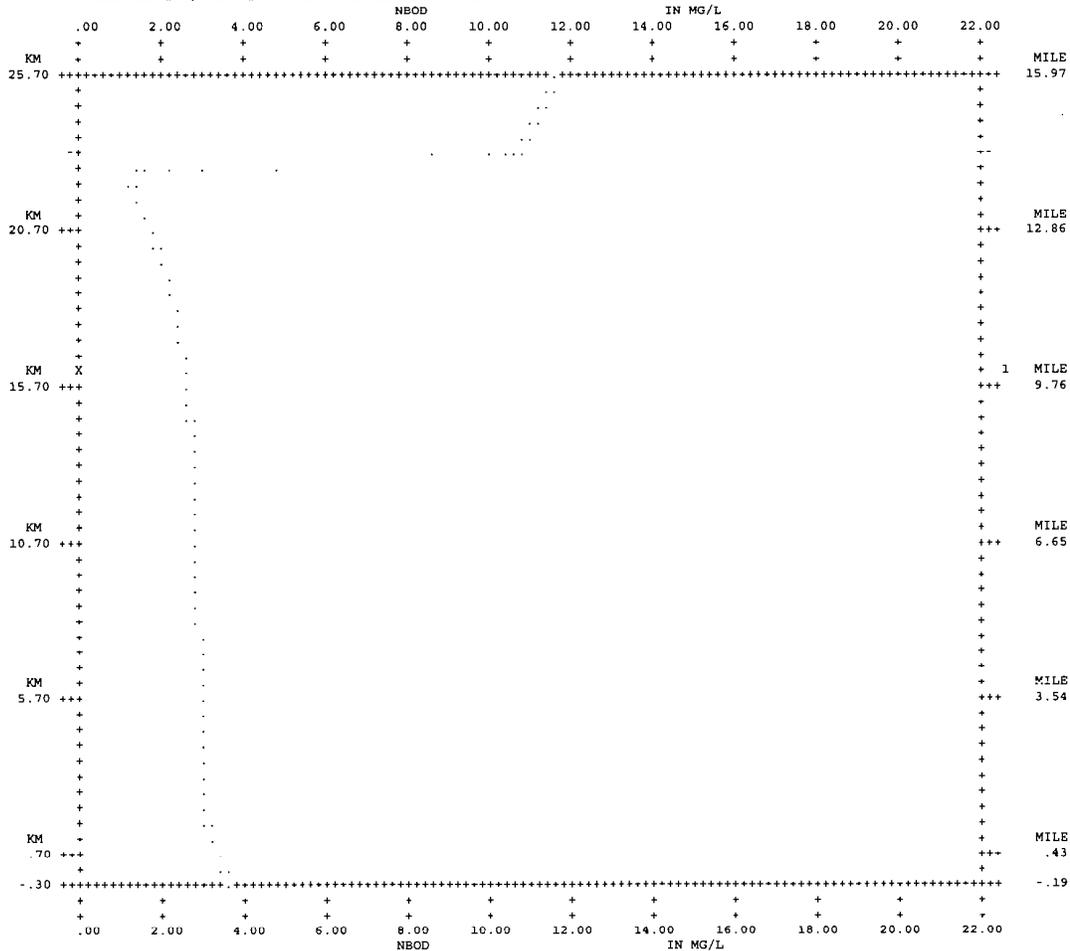
OVERLAY SET # 2, PLOT # 2: BAYOU BLANC RCHS 17-21



. . . . = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

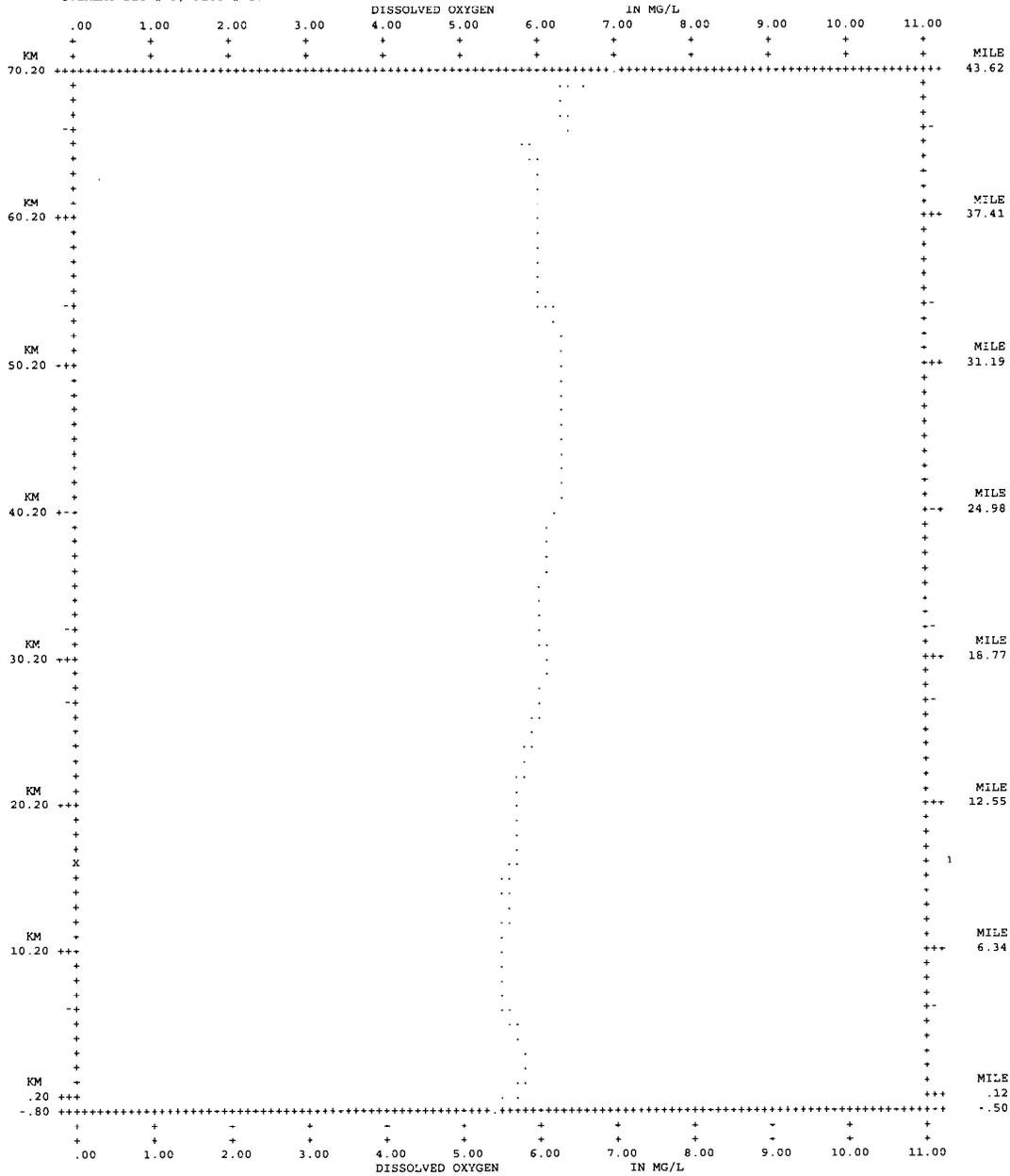
OVERLAY SET # 2, PLOT # 3: BAYOU BLANC RCHS 17-21



. . . . = NBOD
 I-X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ -- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

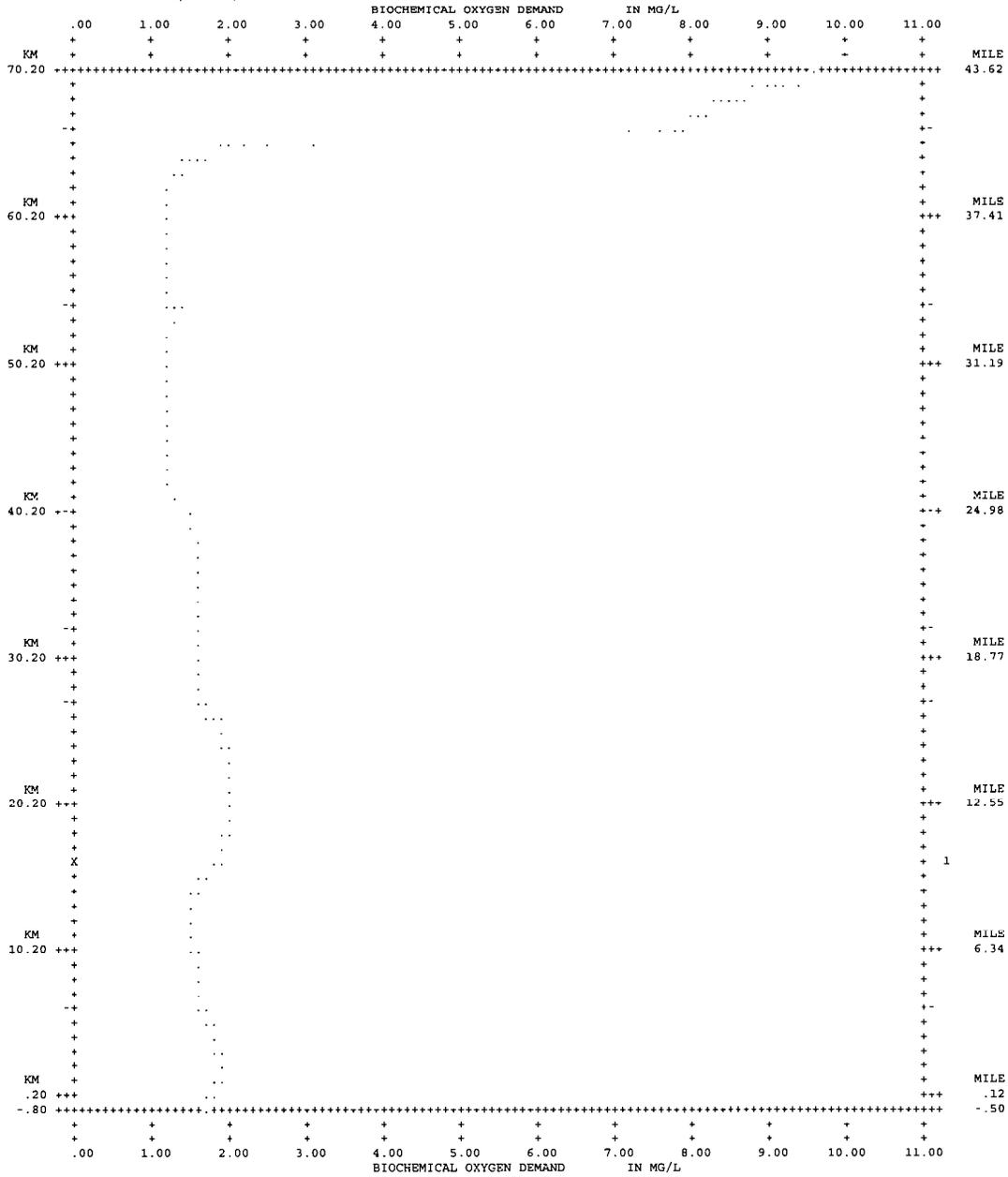
OVERLAY SET # 3, PLOT # 1: BPB RCHS 1-26



. . . = DISSOLVED OXYGEN
 I-X-I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

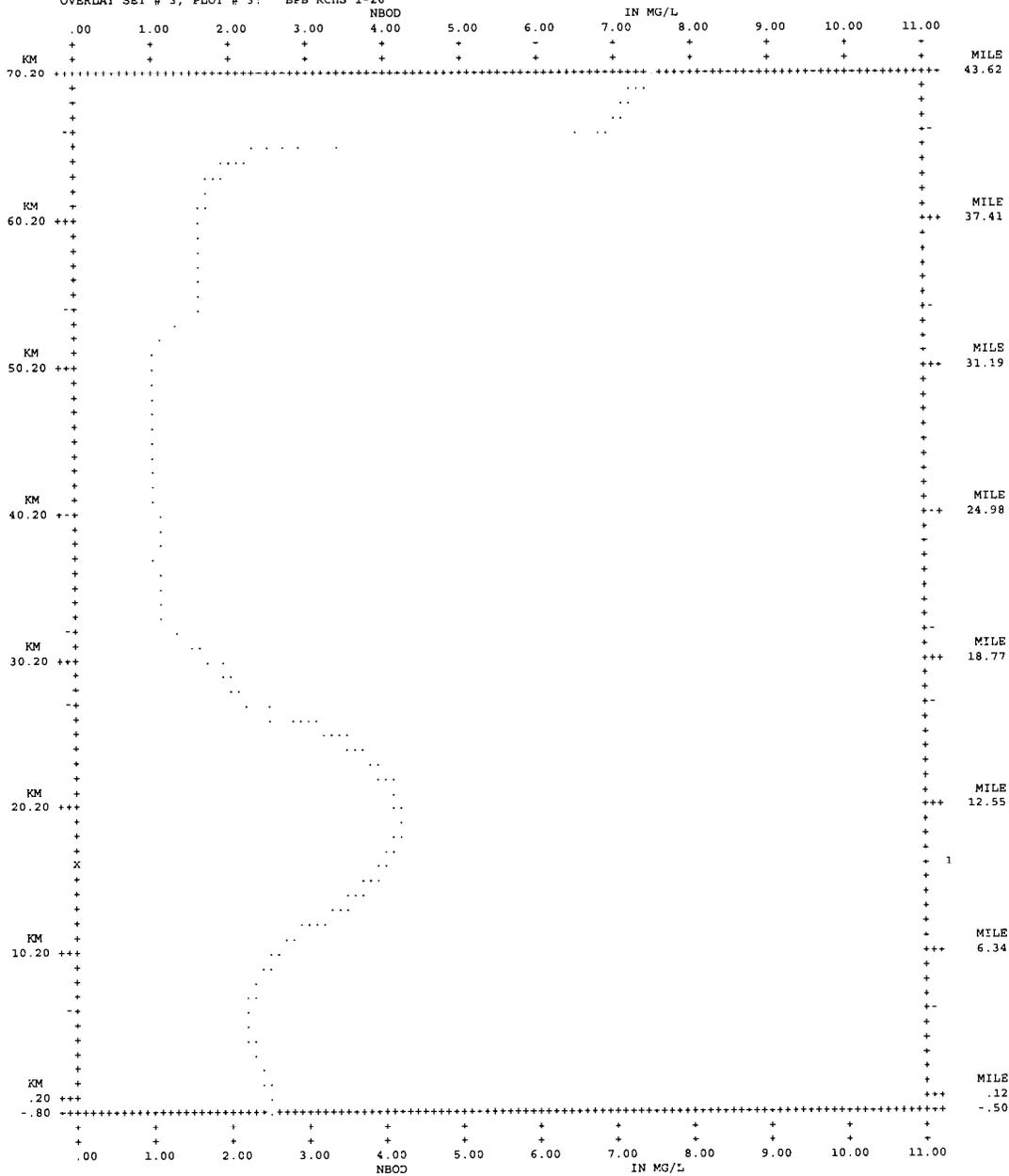
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

OVERLAY SET # 3, PLOT # 2: BPB RCHS 1-26



. . . = BIOCHEMICAL OXYGEN DEMAND BAYOU PLAQUEMINE BRULE WATERSHED
 I--X--I = RANGE OF OBSERVED DATA SUMMER PROJECTION NO-LOAD RUN
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- +- INDICATES MODEL REACH BOUNDARIES

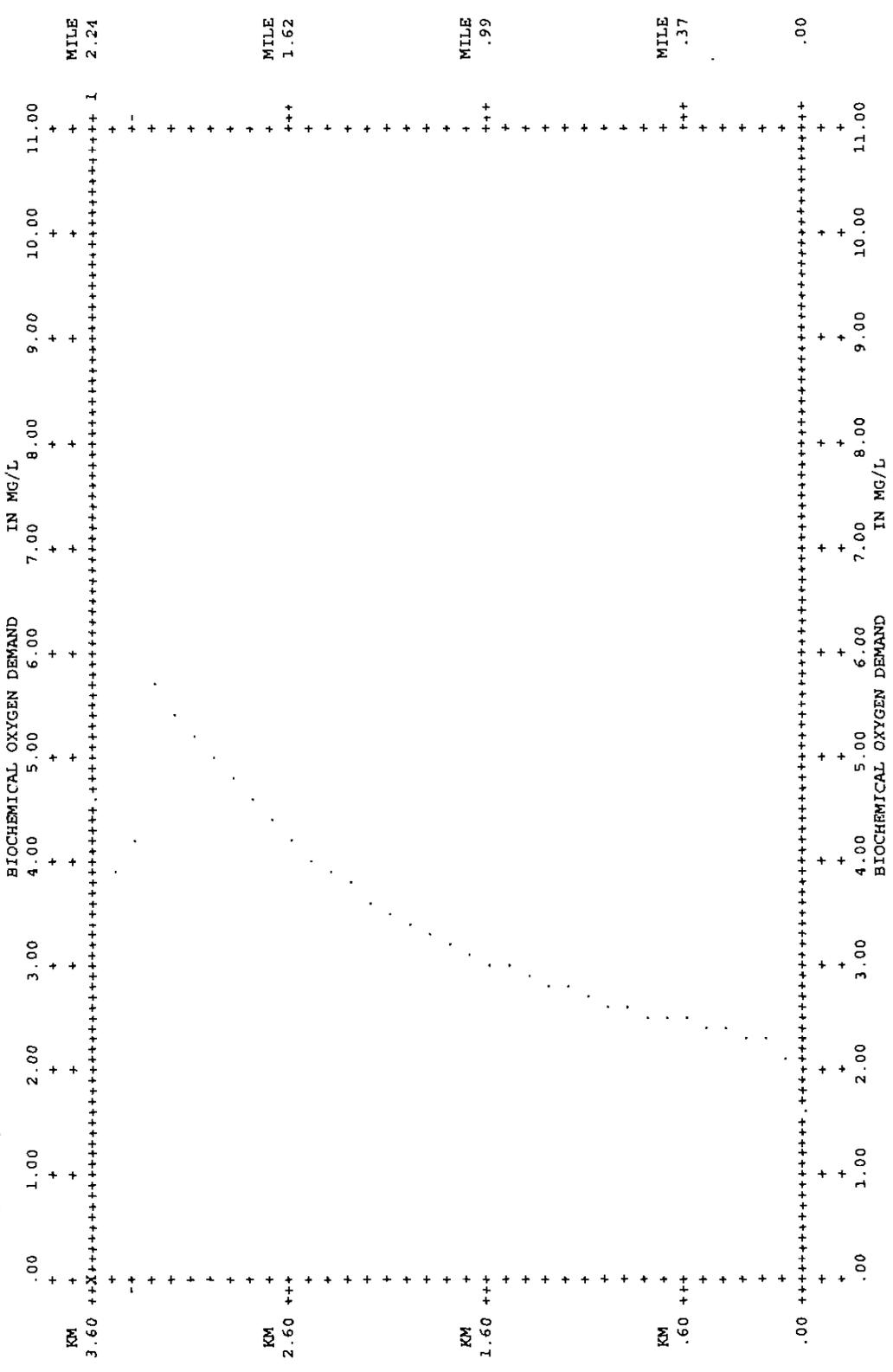
OVERLAY SET # 3, PLOT # 3: BPB RCHS 1-26



..... = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

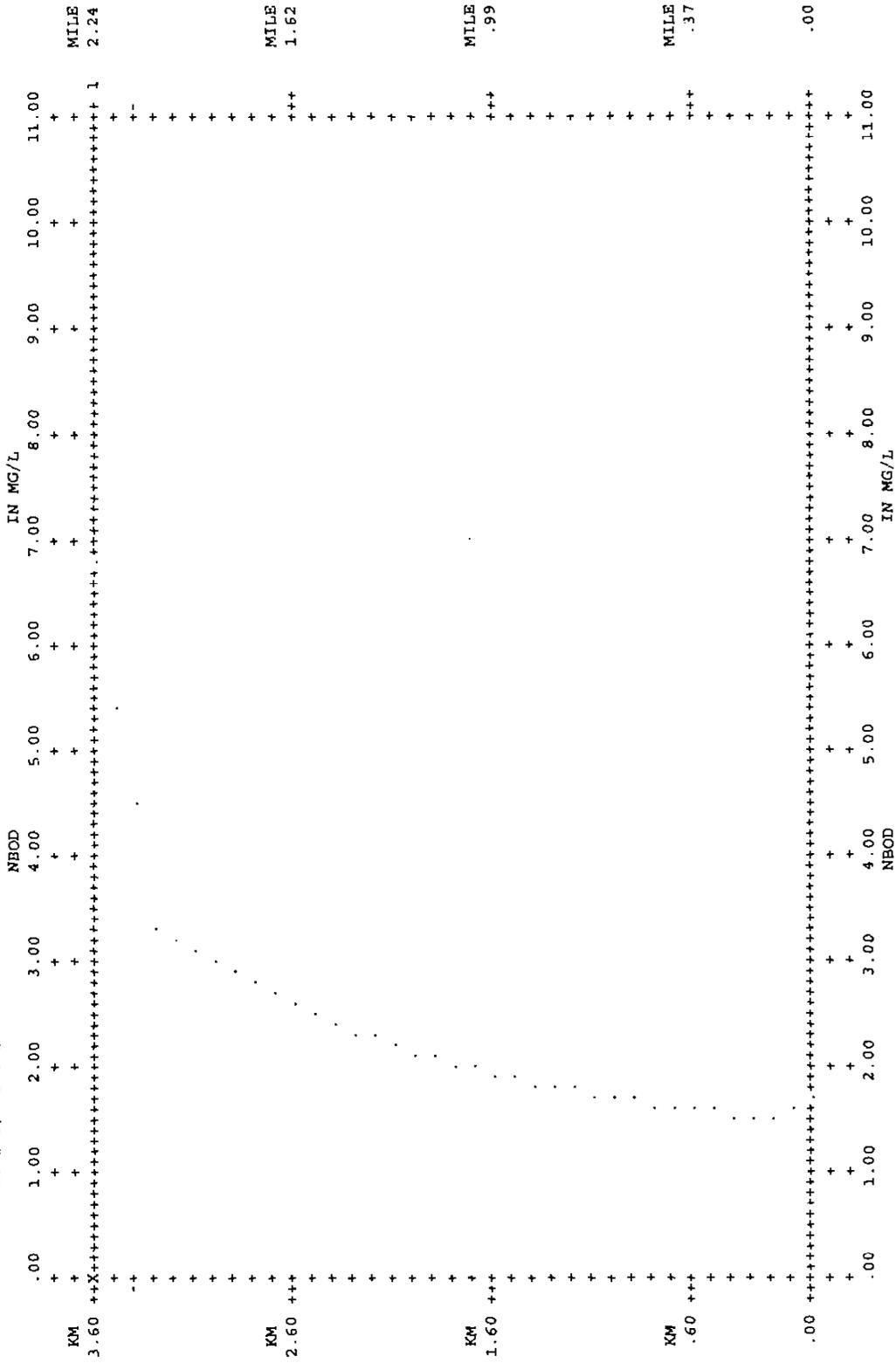
OVERLAY SET # 1, PLOT # 2: ATWOOD RCHS 7-8



..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 +- INDICATES MODEL REACH BOUNDARIES

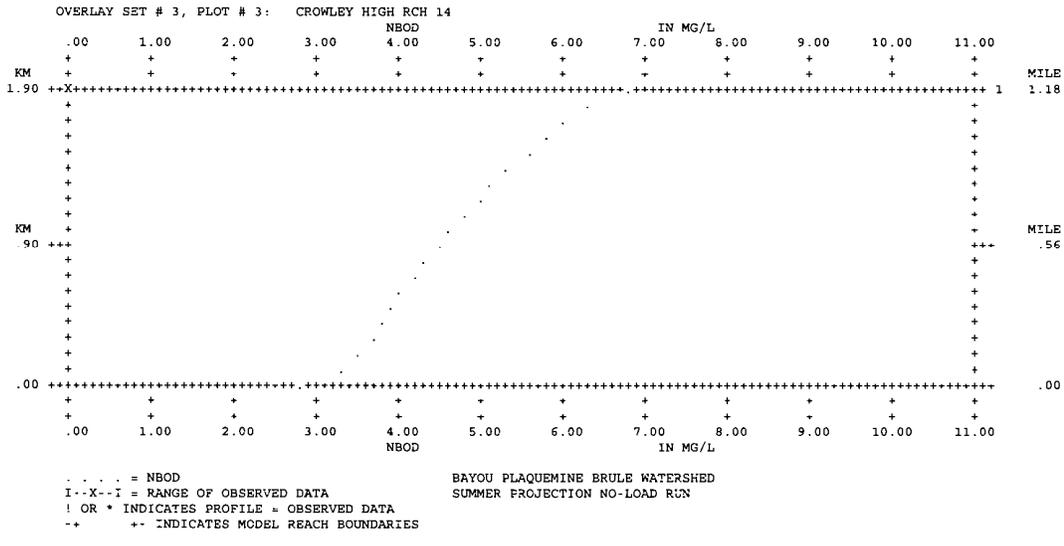
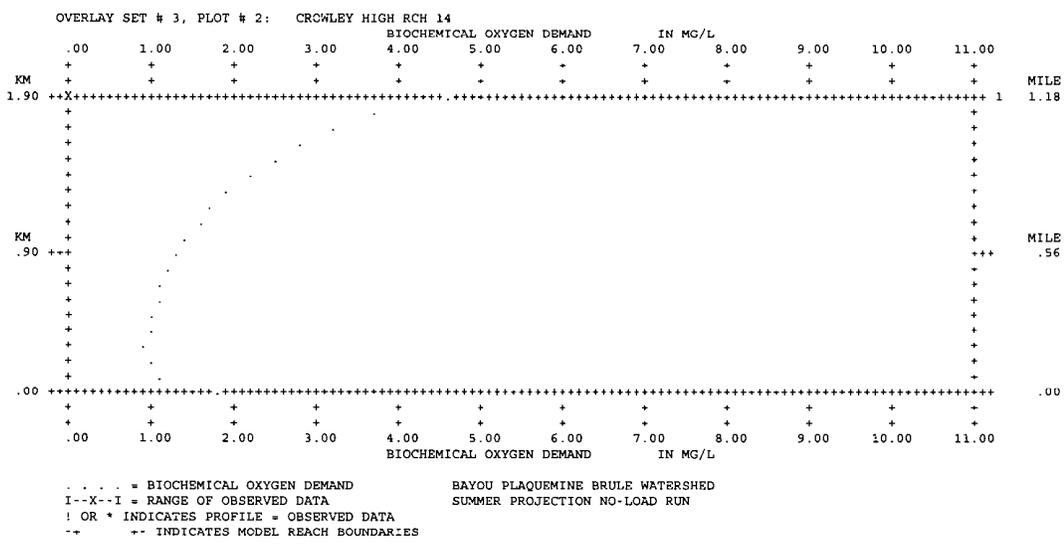
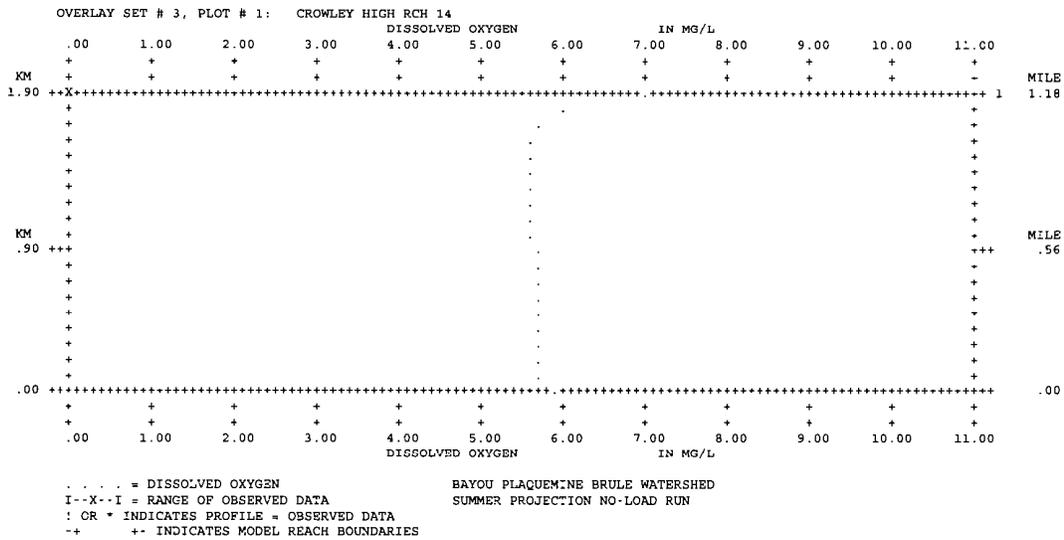
BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

OVERLAY SET # 1, PLOT # 3: ATWOOD RCHS 7-8

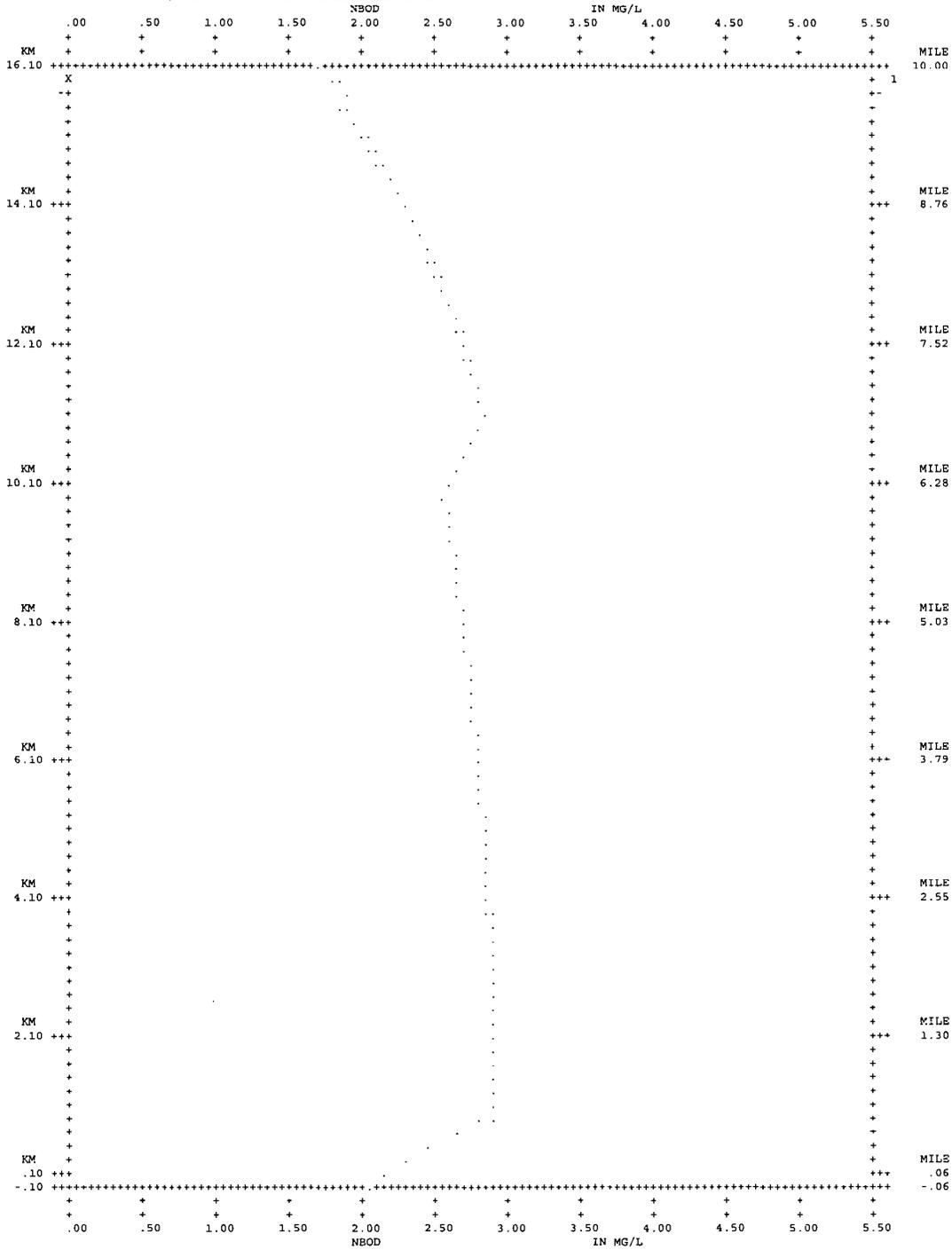


BAYOU PLAQUEMINE BRULE WATERSHED
SUMMER PROJECTION NO-LOAD RUN

..... = NBOD
I-X-I = RANGE OF OBSERVED DATA
! OR * INDICATES PROFILE = OBSERVED DATA
+- INDICATES MODEL REACH BOUNDARIES



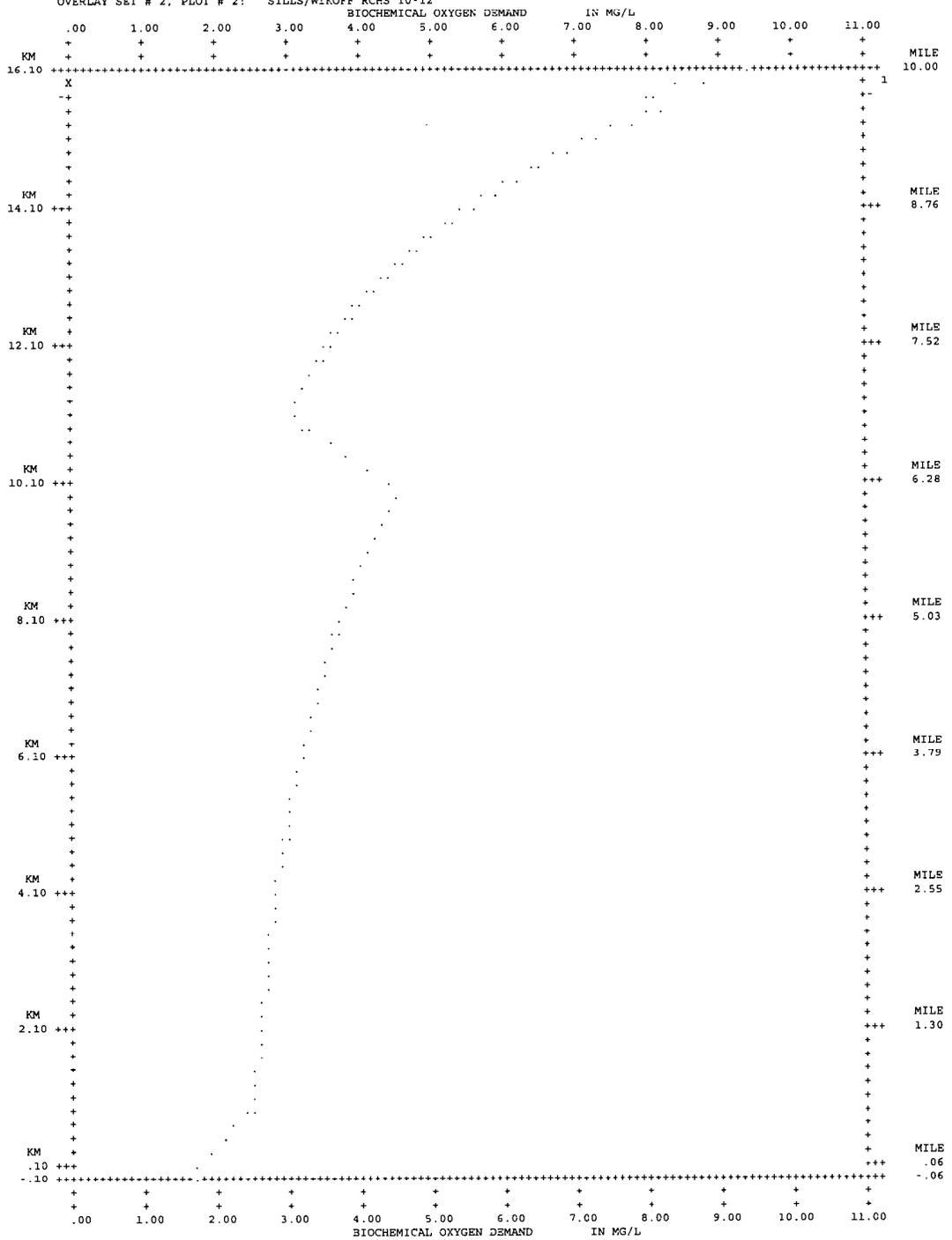
OVERLAY SET # 2, PLOT # 3: SILLS/WIKOFF RCHS 10-12



. . . = NBOD
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

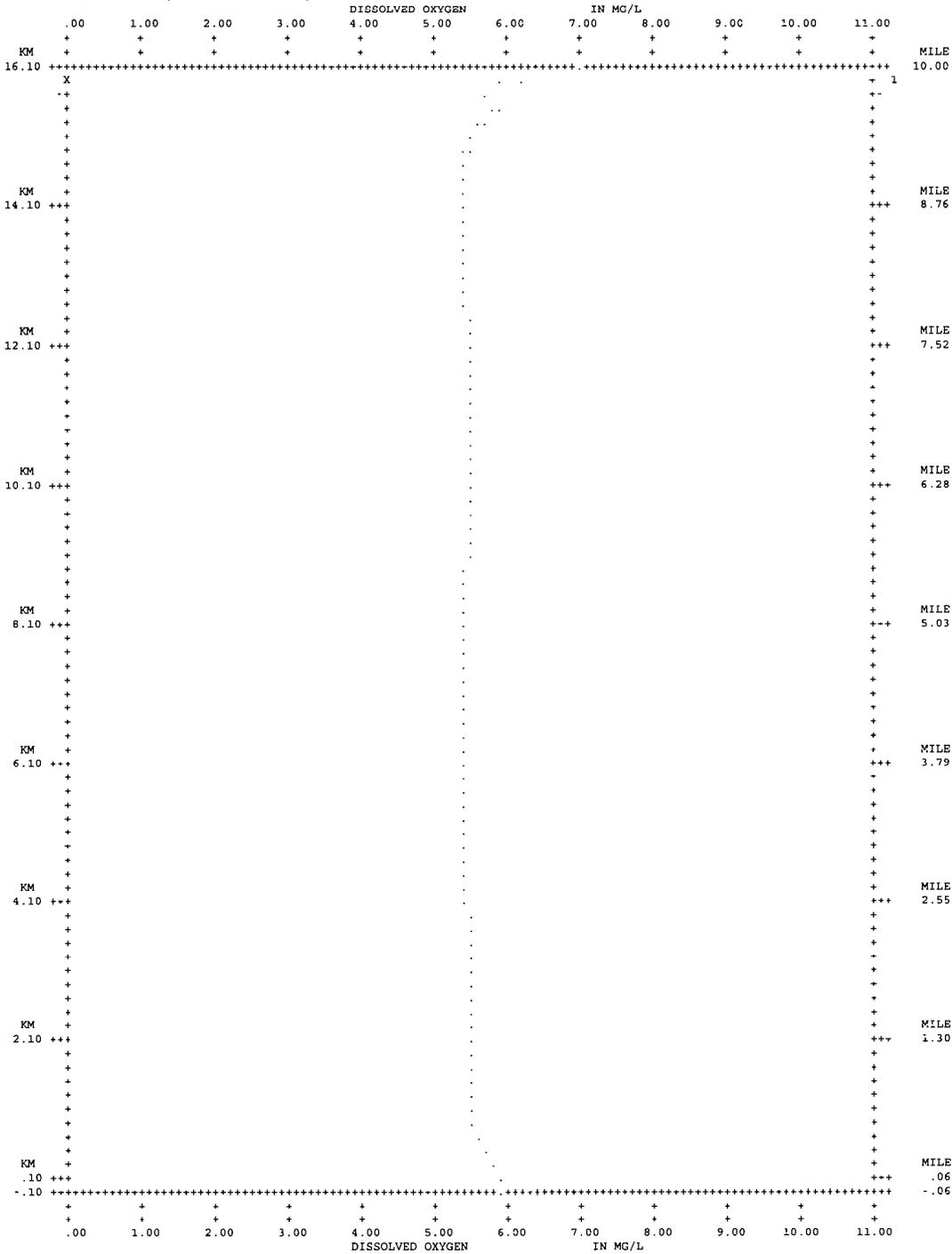
OVERLAY SET # 2, PLOT # 2: SILLS/WIKOFF RCHS 10-12



..... = BIOCHEMICAL OXYGEN DEMAND
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 -+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

OVERLAY SET # 2, PLOT # 1: SILLS/WIKOFF RCHS 10-12



. . . = DISSOLVED OXYGEN
 I--X--I = RANGE OF OBSERVED DATA
 ! OR * INDICATES PROFILE = OBSERVED DATA
 --+ +- INDICATES MODEL REACH BOUNDARIES

BAYOU PLAQUEMINE BRULE WATERSHED
 SUMMER PROJECTION NO-LOAD RUN

APPENDIX G – TMDL CALCULATIONS

BenLoad10.xls / Summer TMDL - Summer TMDL Calculations
BenLoad10.xls / Winter TMDL - Winter TMDL Calculations
SENSIT1.xls - Bayou Plaquemine Brule Summer Projection Sensitivity Analysis

BAYOU PLAQUEMINE BRULE: SUMMER PROJECTION SENSITIVITY ANALYSIS

CHANGE IN MINIMUM DISSOLVED OXYGEN LEVELS

TRIBUTARY SYSTEM	SUMMER PROJECTION		BASEFLOW		DEPTH		REAGRATION		BOD DECAY		BOD SETTLING		BENTHAL		NCM DECAy		TEMPERATURE		HDW FLOW		HDW D.O.		HDW BOD	
	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	+2 deg C	-2 deg C	30%	-30%	30%	-30%	30%	-30%
Upper Bayou Plaquemine Brule	3.11	NA	3.14	NA	3.66	2.08	4.11	1.58	2.80	3.47	3.16	3.06	2.34	3.87	3.00	3.24	2.51	3.70	3.13	3.09	3.11	3.11	3.11	3.11
Lower Bayou Plaquemine Brule	3.15	NA	3.15	NA	3.19	3.01	4.20	1.53	2.98	3.41	3.33	2.93	2.88	3.42	2.99	3.39	2.77	3.54	3.15	3.14	3.15	3.15	3.15	
Atwood Gully, Atwood Bayou	3.04	NA	3.04	NA	3.66	1.88	3.91	1.69	2.87	3.22	3.07	3.01	2.26	3.82	2.85	3.25	2.47	3.58	3.04	3.04	3.04	3.04	3.04	
Sills Gully, Sills Bayou, Bayou Wikoff	3.20	3.32	NA	3.81	1.99	4.14	1.58	3.01	3.40	3.23	3.16	3.22	4.05	3.02	3.39	3.24	3.80	3.32	3.05	3.21	3.18	3.17	3.22	
Crowley High Gully	3.13	NA	3.13	NA	3.87	1.72	4.12	1.44	2.97	3.29	3.18	3.07	2.07	4.13	3.03	3.24	2.48	3.74	3.13	3.13	3.13	3.13	3.13	
Bayou Blanc	3.12	NA	3.12	NA	3.43	2.41	4.16	1.34	3.13	3.15	3.19	3.05	2.59	3.59	3.15	3.09	2.81	3.44	3.12	3.12	3.12	3.12	3.13	
North Coulee Trief	3.03	NA	3.25	NA	3.74	1.71	4.02	1.43	2.90	3.17	3.05	3.00	2.09	3.95	2.82	3.26	2.38	3.65	2.73	2.73	3.14	2.89	2.98	

TRIBUTARY SYSTEM

TRIBUTARY SYSTEM	HDW NCM		WASTELOAD DO		WASTELOAD FLOW		WASTELOAD CBOD		WASTELOAD NBOD		LBC TEMPERATURE		LBC D.O.		LBC UC/BOD		LBC UNBOD	
	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%
Upper Bayou Plaquemine Brule	3.11	3.11	3.16	3.05	3.06	3.20	2.71	3.51	2.96	3.26	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11
Lower Bayou Plaquemine Brule	3.15	3.15	3.14	3.17	3.13	3.13	3.17	3.17	3.13	3.17	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15
Atwood Gully, Atwood Bayou	3.04	3.04	3.38	2.66	3.15	2.89	2.83	3.24	2.80	3.28	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04
Sills Gully, Sills Bayou, Bayou Wikoff	3.19	3.20	3.27	3.08	3.16	3.27	3.01	3.39	2.99	3.40	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Crowley High Gully	3.13	3.13	3.19	2.98	3.22	3.01	2.93	3.31	3.01	3.25	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13
Bayou Blanc	3.12	3.12	3.12	3.12	3.00	3.21	3.04	3.21	3.07	3.17	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
North Coulee Trief	3.02	3.04	3.05	3.01	2.89	3.20	2.93	3.12	2.79	3.27	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03

PERCENT CHANGE IN MINIMUM DISSOLVED OXYGEN LEVELS

TRIBUTARY SYSTEM	BASEFLOW		DEPTH		REAGRATION		BOD DECAY		BOD SETTLING		BENTHAL		NCM DECAy		TEMPERATURE		HDW FLOW		HDW D.O.		HDW BOD	
	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	+2 deg C	-2 deg C	30%	-30%	30%	-30%	30%	-30%
Upper Bayou Plaquemine Brule	0.96	NA	17.68	-33.12	32.15	-49.20	-9.97	11.58	1.61	-1.61	-24.76	24.44	-3.54	4.18	-19.29	18.97	0.64	-0.64	0.00	0.00	0.00	0.00
Lower Bayou Plaquemine Brule	0.00	NA	1.27	-4.44	33.33	-51.43	-5.40	8.25	5.71	-6.98	-8.57	8.57	-5.08	7.62	-12.06	12.38	0.00	-0.32	0.00	0.00	0.00	0.00
Atwood Gully, Atwood Bayou	0.00	NA	20.39	-38.16	28.62	-44.41	-5.59	5.92	0.99	-0.99	-25.66	25.66	-6.25	6.91	-18.75	17.76	0.00	0.00	0.00	0.00	0.00	0.00
Sills Gully, Sills Bayou, Bayou Wikoff	3.75	NA	19.06	-37.81	29.38	-50.63	-5.94	6.25	0.94	-1.25	-27.50	26.56	-5.63	5.94	1.25	18.75	3.75	-4.69	0.31	-0.63	-0.94	0.63
Crowley High Gully	0.00	NA	23.64	-45.05	31.63	-53.99	-5.11	5.11	1.60	-1.92	-33.87	31.95	-3.19	3.51	-20.77	19.49	0.00	0.00	0.00	0.00	0.00	0.00
Bayou Blanc	0.00	NA	9.94	-22.76	33.33	-57.05	0.32	0.96	2.24	-2.24	-16.99	15.06	0.96	-0.96	-9.94	10.26	0.00	0.32	0.00	0.00	0.00	0.00
North Coulee Trief	7.25	NA	23.43	-43.56	32.67	-52.81	-4.29	4.62	0.66	-0.99	-31.02	30.36	-6.93	7.59	-21.45	20.46	7.26	-9.90	3.63	-4.62	-1.65	1.65
AVERAGE MINIMUM D.O. CHANGE (%)	1.71	NA	16.49	-32.13	31.59	-51.36	-5.14	6.10	1.96	-2.28	-24.05	23.23	-4.24	4.97	-14.43	16.87	1.66	-2.18	0.56	-0.75	-0.37	0.37

TRIBUTARY SYSTEM

TRIBUTARY SYSTEM	HDW NCM		WASTELOAD DO		WASTELOAD FLOW		WASTELOAD CBOD		WASTELOAD NBOD		LBC TEMPERATURE		LBC D.O.		LBC UC/BOD		LBC UNBOD	
	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%	30%	-30%
Upper Bayou Plaquemine Brule	0.00	0.00	1.61	-1.93	-1.61	2.89	-12.86	12.86	-4.82	4.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower Bayou Plaquemine Brule	0.00	0.00	0.00	-0.32	0.63	-0.63	0.63	0.63	0.63	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atwood Gully, Atwood Bayou	0.00	0.00	11.18	-12.50	3.62	-4.93	-6.91	6.58	-7.89	7.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sills Gully, Sills Bayou, Bayou Wikoff	-0.31	0.00	2.19	-3.75	-1.25	2.19	-5.94	5.94	-6.56	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crowley High Gully	0.00	0.00	1.92	-4.79	2.88	-3.83	-6.39	5.75	-3.83	3.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bayou Blanc	0.00	0.00	0.00	0.00	-3.85	2.88	-2.56	2.88	-1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
North Coulee Trief	-0.33	0.33	0.66	-0.66	-4.62	5.61	-3.30	2.97	-7.92	7.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVERAGE MINIMUM D.O. CHANGE (%)	-0.09	0.05	2.51	-3.42	-0.60	0.60	-5.51	5.37	-4.75	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTES: HDW = HEADWATER, LBC = LOWER BOUNDARY CONDITION

Summer TMDL calculations															
Reach	Reach number	Reach length (km)	Reach width (m)	Reach area (m ²)	Reach UC/BOD (gm/m ² -d)	Nonpoint UC/BOD (gm/m ² -d)	Nonpoint UNBOD (gm/m ² -d)	SOD at 20 °C (gm/m ² -d)	Stream temp °C	SOD at stream temp (gm/m ² -d)	Benthic load at stream temp (lb/reach-day) (%)	Percent of TMDL	Nonpoint UC/BOD (lb/reach-day)	Nonpoint UNBOD (lb/reach-day)	SOD at stream temp (lb/reach-day)
Bayou Plaquemine Brule	1	4.0	1.5	6000	0.500	0.500	1.0	28.1	28.1	1.67	35.23		6.61	6.61	22.01
Bayou Plaquemine Brule	2	0.2	7.4	1480	0.473	0.000	1.4	28.1	28.1	2.33	9.14		1.54	0.00	7.60
Bayou Plaquemine Brule	3	11.8	7.4	87320	0.450	0.000	1.4	28.1	28.1	2.33	535.02		86.56	0.00	448.45
Bayou Plaquemine Brule	4	14.0	12.0	168000	0.714	0.714	1.0	28.1	28.1	1.67	1144.92		284.32	284.32	616.29
Bayou Plaquemine Brule	5	8.0	28.9	231200	2.163	2.163	0.5	28.1	28.1	0.83	2626.71		1101.32	1101.32	424.07
Bayou Plaquemine Brule	6	0.8	30.0	24000	2.917	2.917	0.5	28.1	28.1	0.83	352.39		154.19	154.19	44.02
Atwood Gully	7	0.2	7.8	1560	0.000	0.000	1.6	28.1	28.1	2.66	9.16		0.00	0.00	9.16
Atwood Bayou	8	3.4	5.1	17340	0.173	0.115	1.0	28.1	28.1	1.67	74.62		6.61	4.41	63.61
Bayou Plaquemine Brule	9	1.1	26.0	28600	2.448	2.448	0.5	28.1	28.1	0.83	360.83		154.19	154.19	52.46
Sills Gully	10	0.4	2.0	800	0.000	0.000	1.6	28.1	28.1	2.66	4.70		0.00	0.00	4.70
Sills Bayou	11	4.7	2.5	11750	0.000	0.000	1.6	28.1	28.1	2.66	68.97		0.00	0.00	68.97
Bayou Wikoff	12	11.0	2.7	29700	0.000	0.000	1.1	28.1	28.1	1.83	119.85		0.00	0.00	119.85
Bayou Plaquemine Brule	13	3.2	35.1	112320	2.671	2.671	0.5	28.1	28.1	0.83	1527.60		660.79	660.79	206.02
Crowley High Gully	14	1.9	3.4	6460	0.155	0.000	1.7	28.1	28.1	2.83	42.48		2.20	0.00	40.29
Bayou Plaquemine Brule	15	5.4	34.3	185220	2.592	1.620	0.0	28.1	28.1	0.00	1718.06		1057.27	660.79	0.00
Bayou Plaquemine Brule	16	6.4	40.3	257920	2.191	1.376	0.0	28.1	28.1	0.00	2026.43		1244.49	781.94	0.00
Bayou Blanc	17	2.5	3.7	9250	0.000	0.000	1.8	28.1	28.1	3.00	61.08		0.00	0.00	61.08
Bayou Blanc Lake	18	0.4	39.2	15680	0.000	0.000	1.0	28.1	28.1	1.67	57.52		0.00	0.00	57.52
Bayou Blanc Lake	19	0.5	39.2	19600	0.000	0.000	1.0	28.1	28.1	1.67	71.90		0.00	0.00	71.90
Bayou Blanc	20	15.9	5.1	81090	0.000	0.000	1.0	28.1	28.1	1.67	297.47		0.00	0.00	297.47
Bayou Blanc	21	6.4	20.0	128000	0.313	1.094	1.0	28.1	28.1	1.67	866.03		88.11	308.37	469.55
Bayou Plaquemine Brule	22	0.5	50.0	25000	2.200	2.800	0.0	28.1	28.1	0.00	275.33		121.15	154.19	0.00
North Coulee Trief	23	1.0	2.3	2300	0.000	0.000	1.7	28.1	28.1	2.83	14.34		0.00	0.00	14.34
Bayou Plaquemine Brule	24	2.8	47.8	133840	2.017	2.017	0.0	28.1	28.1	0.00	1189.43		594.71	594.71	0.00
Bayou Plaquemine Brule	25	6.0	63.5	381000	2.625	0.787	0.0	28.1	28.1	0.00	2863.44		2202.64	660.79	0.00
Bayou Plaquemine Brule	26	6.0	51.8	310800	3.218	0.965	0.0	28.1	28.1	0.00	2863.44		2202.64	660.79	0.00
Total benthic load (lbs/day) -->											19216.09		9949.34	6167.40	3099.35
Total headwater load (lbs/day) -->											86.89		53.01	33.89	
Total nonpoint load (lbs/day) -->											19302.98	90.9	10002.35	6201.29	3099.35
Total facility load (lbs/day) -->											1539.6	7.3	722.00	817.60	
Facility margin of safety -(lbs/day) -->											384.9	1.8			
Total maximum daily load (lbs/day) -->											21227.48				

Reach Name	Reach number	Reach length (km)	Reach width (m)	Reach area (m ²)	Winter TMDL calculations									
					Nonpoint UCBOD	Nonpoint UNBOD	SOD at 20 oC	Stream temp	SOD at stream temp	Benthic load at stream temp	Percent of TMDL	Nonpoint UCBOD	Nonpoint UNBOD	SOD at stream temp
Bayou Plaquemine Brule	1	4.0	4.9	19600	0.612	0.510	1.0	15.7	0.76	81.39	26.43	22.03	32.93	
Bayou Plaquemine Brule	2	0.2	7.4	1480	0.473	0.000	1.4	15.7	1.07	5.02	1.54	0.00	3.48	
Bayou Plaquemine Brule	3	11.8	7.4	87320	0.450	0.000	1.4	15.7	1.07	291.96	86.56	0.00	205.39	
Bayou Plaquemine Brule	4	14.0	12.0	168000	0.714	0.714	1.0	15.7	0.76	810.89	264.32	264.32	282.26	
Bayou Plaquemine Brule	5	8.0	28.9	231200	2.163	2.163	0.5	15.7	0.38	2396.87	1101.32	1101.32	194.22	
Bayou Plaquemine Brule	6	0.8	30.0	24000	2.917	2.917	0.5	15.7	0.38	328.53	154.19	154.19	20.16	
Atwood Gully	7	0.2	7.8	1560	0.000	0.000	1.6	15.7	1.22	4.19	0.00	0.00	4.19	
Atwood Bayou	8	3.4	12.4	42160	0.166	0.166	1.0	15.7	0.76	101.67	15.42	15.42	70.83	
Bayou Plaquemine Brule	9	1.1	26.0	28600	2.448	2.448	0.5	15.7	0.38	332.40	154.19	154.19	24.03	
Sills Gully	10	0.4	5.8	2320	0.000	0.000	1.6	15.7	1.22	6.24	0.00	0.00	6.24	
Sills Bayou	11	4.7	6.8	31960	0.000	0.000	1.6	15.7	1.22	85.91	0.00	0.00	85.91	
Bayou Wikoff	12	11.0	7.1	78100	0.000	0.000	1.1	15.7	0.84	144.34	0.00	0.00	144.34	
Bayou Plaquemine Brule	13	3.2	35.1	112320	2.671	2.671	0.5	15.7	0.38	1415.94	660.79	660.79	94.36	
Crowley High Gully	14	1.9	3.4	6460	0.155	0.000	1.7	15.7	1.30	20.65	2.20	0.00	18.45	
Bayou Plaquemine Brule	15	5.4	34.3	185220	2.592	1.620	0.0	15.7	0.00	1718.06	1057.27	660.79	0.00	
Bayou Plaquemine Brule	16	6.4	40.3	257920	2.191	1.376	0.0	15.7	0.00	2026.43	1244.49	781.94	0.00	
Bayou Blanc	17	2.5	4.3	10750	0.000	0.000	1.8	15.7	1.37	32.51	0.00	0.00	32.51	
Bayou Blanc Lake	18	0.4	39.2	15680	0.000	0.000	1.0	15.7	0.76	26.34	0.00	0.00	26.34	
Bayou Blanc Lake	19	0.5	39.2	19600	0.000	0.000	1.0	15.7	0.76	32.93	0.00	0.00	32.93	
Bayou Blanc	20	15.9	5.6	89040	0.000	0.000	1.0	15.7	0.76	149.60	0.00	0.00	149.60	
Bayou Blanc	21	6.4	20.0	128000	0.313	1.094	1.0	15.7	0.76	611.53	88.11	308.37	215.06	
Bayou Plaquemine Brule	22	0.5	50.0	25000	2.200	2.300	0.0	15.7	0.00	275.33	121.15	154.19	0.00	
North Coulee Trief	23	1.0	6.1	6100	0.000	0.000	1.7	15.7	1.30	17.42	0.00	0.00	17.42	
Bayou Plaquemine Brule	24	2.8	47.8	133840	2.017	2.317	0.0	15.7	0.00	1189.43	594.71	594.71	0.00	
Bayou Plaquemine Brule	25	6.0	63.5	381000	2.625	0.787	0.0	15.7	0.00	2863.44	2202.64	660.79	0.00	
Bayou Plaquemine Brule	26	6.0	51.8	310800	3.218	0.965	0.0	15.7	0.00	17832.47	9977.97	6193.83	1660.66	
Total headwater load (lbs/day) -->										868.93	530.05	338.88		
Total nonpoint load (lbs/day) -->										18701.40	10508.02	6532.71	1660.66	
Total facility load (lbs/day) -->										2256.11	10.5	1166.08	1090.03	
Facility margin of safety (lbs/day) -->										564.03	2.6			
Total maximum daily load (lbs/day) -->										21521.54				